

PD-ABD-874
76031

ENVIRONMENTAL PLANNING AND MANAGEMENT PROJECT (EPM)

(Project No. 936-5517)

Final Evaluation

Report

Pursuant to Terms of Reference for Final Evaluation

Evaluation Team

External:

**Dr. Arthur Hanson
John Rigby**

S&T/FENR:

**Dr. Cynthia L. Jensen (AAAS Fellow)
Dr. John Swallow**

**Washington, D.C.
July 1991**

Environmental Planning and Management Project (EPM)

**Final Evaluation
(July 1, 1991)**

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EXECUTIVE SUMMARY

BACKGROUND

This is a final evaluation of the Environmental Planning and Management Project (EPM), Project No. 936-5517. The Project was established in 1982 by S&T/FENR and is implemented through a cooperative agreement with the World Resources Institute (WRI) whose Center for International Development and Environment (Center) is responsible for carrying out project activities. The Center was established in 1988 as a result of the merger with WRI of the North America office of the International Institute for Environment and Development (IIED/NA), the original grantee under the 1982 cooperative agreement and a 1985 revision.

The project authorization completion date is August 26, 1992. Conclusions and recommendations from this evaluation are to be used by the Center and A.I.D. in formulation of a possible follow-on EPM II project.

The EPM project goal is to promote long-term sustainable development through improved natural resources management (NRM) and planning. The purpose of the EPM project is to strengthen the capabilities of public and private institutions in developing countries to better manage and conserve their natural resources by incorporating natural resource management (NRM) into development planning.

The EPM project addresses its purpose by activities under four inter-related program themes:

- o Natural resource management strategies and assessments
- o Non-governmental organizations support
- o Natural resource data management
- o Sustainable agricultural development

In addition, the project has addressed biodiversity conservation and tropical forestry and land use concerns.

Since a 1985 revision to the EPM cooperative agreement, EPM project activities have been carried out in 53 countries: 24 in Africa, 14 in Asia/Near East, and 15 in Latin America and the Caribbean. Through FY 1990 the Center spent a total of \$9,344,244 in EPM funds, of which 64% were S&T/FENR core funding and 36% were A.I.D. regional bureau and USAID mission buy-ins.

PURPOSES OF THE EVALUATION

The principal purposes of the final evaluation are to answer questions addressing:

1. progress made in addressing overarching issues in NRM,

2. progress made in the four program theme areas towards program-specific objectives,
3. impact of the cooperative agreement mode on the project implementors,
4. constraints and opportunities inherent in the design and management of the project, and
5. guidance and recommendations for design of the follow-on EPM II project.

The evaluation collected data from reports, documents and interviews in Washington, D.C. and field visits to 9 of the countries in which EPM has been active. Following an evaluation cable inquiry, feedback was obtained from 42 USAID missions through a combination of cable responses and in-person or telephone interviews. The evaluation team has been guided by terms of reference that include some 50 specific questions.

FINDINGS AND CONCLUSIONS

Natural resource management strategies and assessments (NRMSA)

The evaluation team determined that EPM's approaches under the NRMSA program theme are participatory, flexible, collaborative, supportive of national capacity, and generally client-responsive. NRMSA activities supported under the EPM project include development of environmental profiles, natural resource assessments, and environmental strategies and action plans. The processes of developing NRM assessments, plans and strategies have value as a capacity-building exercise, and the evaluation found evidence that the project has contributed to:

1. formulation of NRM policies
2. creation and/or strengthening of NRM institutions
3. multi-sectoral coordination
4. capacity for natural resources data management and environmental assessment
5. mechanisms for private sector/NGO participation in NRM

Most NRMSA activities have been associated with extensive follow-on activities by host country institutions and external support agencies. EPM has been involved in sustained follow-on activities in relatively few instances, because typically EPM's role has been strategic but limited within the complex context of a multi-institutional, multi-factor process. The evaluation found strong evidence that in many instances EPM filled critical gaps and promoted strategic linkages that were important to development of NRM processes.

Non-governmental Organization Support

The NGO support program addresses specific NGO needs relevant to more effective NGO participation in NRM processes. These needs

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include: (1) deficiencies in skills and systems required to integrate NRM factors into their development activities; (2) limited capacity and resources of NGOs to influence policy; and (3) weak administrative and management capacity of NGOs.

NGO support under EPM has included development and dissemination of guides and analytical tools on participatory approaches to NRM. With financial and technical assistance, EPM has actively brought NGOs into national level NRM policy and planning activities. Through an NGO policy impact program (partially funded by EPM and with major program support from U.S. foundations), the Center has undertaken a research and case study program to document community or village level experiences in NRM.

The evaluation determined that the most important aim and effect of EPM's NGO support work is to enable and engage NGOs for direct participation in NRM decision making and implementation processes. Through the NGO case study program, the Center has become effectively engaged in studying and illuminating the creative process of local level NRM decision-making, planning, and implementation which can contribute to and operate independently of national level NRM processes.

Natural resources data management (NRDM)

The NRDM program theme area concentrates on (1) developing information policies and strategies for international agencies; (2) developing statistical indicators of trends in natural resources and analysis of natural resources data; and (3) increasing global availability of natural resources information.

The evaluation has determined that EPM through the NRDM theme area has increased the availability, analysis and use of natural resources data to and by international agencies. To date NRDM has made less of a contribution towards developing the capacity of public and private institutions in developing countries. The need and opportunities for using NRDM as a means to strengthen national capabilities are being increasingly recognized and pursued by the Center. The Center is planning on establishing tighter links between the NRDM activities and the NRMSA program theme area of EPM.

Sustainable agriculture

Sustainable agriculture (SA) was a central element in the work of IIED/NA under EPM. EPM's recognized place in sustainable agriculture was due to IIED/NA's capacity for research and training in participatory NRM approaches and agro-ecosystems analyses and perspectives. EPM's capacity to fill an important niche in SA was a temporary casualty of the WRI-Center merger because of the distancing of IIED/London from its central role in

the EPM agenda. In 1990 the Center took the initiative to reestablish itself in sustainable agriculture and has added staff to do so. The Center is currently examining how best to involve itself in SA.

The evaluation determined that the Center's renewed interest in SA addressed NRM factors common to other EPM activities such as increasing grassroots stakeholder participation, promoting equity, gap filling in NRM processes, making bottom-top linkages, developing practical analytical tools, and integrating other EPM theme areas (particularly NGO support, tropical forestry and land use, and biodiversity conservation). The evaluation concluded that the proposed EPM SA program would be a good fit with EPM and would bring focus and elements not currently addressed within the other theme areas.

Program matters outside the four theme areas

- Biodiversity conservation program

The primary focus of EPM work in this sub-theme area has been on conducting critical analyses of biodiversity conservation efforts. These analyses have been used by A.I.D. in reporting to the U.S. Congress and to seek greater commitments to biodiversity conservation efforts by other development agencies and institutions. EPM supported the Center's effort in forming the Biodiversity Support Program (BSP) consortium in which the Center has associated with the World Wildlife Fund (the consortium's lead implementing agency) and the Nature Conservancy.

The evaluation determined that the Center's work in biodiversity has major features in common with the principal EPM theme area programs. The focus of the Center's biodiversity activities has been on analyses that support policy development and implementation. The Center's biodiversity work directly addresses the connection between development and environment, and biodiversity assessments and other activities have depended upon and helped build developing country technical capacity. The biodiversity activities of the Center have been marked by the same concern for local ownership and public participation that is evident in other Center activities.

- Tropical forestry and land use

The Center's work in tropical forestry and land use (TFLU), with some limited EPM support, centers on policy analysis of tropical forestry issues, primarily in the context of the Tropical Forestry Action Plan (TFAP). These activities are an important link between the Center and the rest of WRI. WRI's strengths in policy analysis, data management, and publications have improved the Center's efforts to monitor the TFAP program.

The TFLU activities share with the biodiversity and sustainable agriculture programs a concern for integrating tropical forestry into overall natural resources management and planning.

-- Gender framework for NRM

The evaluation TOR specifically asked the team to examine the extent to which EPM does or should deal specifically with gender issues in NRM.

The evaluation determined that there are clearly gender-specific constraints in the NRM process, manifested at various points in the NRM continuum from participatory planning through implementation. The EPM project has shed some light on these constraints, although in an unsystematic fashion and without substantial evidence that EPM and the Center have fully reacted to their own evidence of importance of gender awareness in NRM. The evaluation concluded that this inattention by the Center to gender issues is surprising in light of the Center's own commitment to illumination of issues of equity and empowerment as furthering the balance between development and sustainable use of the environment.

Impact of EPM cooperative agreement on the Center

The Center's institutional and technical capabilities have been strengthened through its implementation of EPM:

1. clearly it was EPM support of IIED/NA through the mid-1980's that generated the institutional capacity that the Center brought to its merger with WRI
2. the Center has gained strong technical capacity within the several EPM program theme areas as well as the capacity to link them well
3. the cooperative agreement's buy-in mechanism has made the Center an active participant in A.I.D. regional bureau and USAID mission activities
4. the Center has gained an observable capacity to manage change, an extremely important skill in light of the evolutionary and multi-faceted nature of EPM's involvement in NRM; the cooperative agreement's flexibility has enabled the Center to adapt its programming and staffing priorities to emerging roles and needs
5. the cooperative agreement has facilitated complementary financial and program linkages thereby leveraging the Center's NRM work.

The evaluation determined that the Center controls EPM's substantive direction but exercises this control collaboratively with S&T/FENR and with a high level of responsiveness to USAID missions and regional bureaus. For the most part, EPM activities are coterminous with the Center's overall program and the cooperative agreement is the principal financing instrument enabling the Center to attain its program vision of promoting sustainable development through direct work with developing countries.

The 1989 EPM project paper supplement revising the project called for a major management study to define institutional strengthening needs that could be met in the remaining three years of EPM. The fact that the study was never performed quite likely diminished the beneficial effect of EPM upon the Center's institutional capacity.

Project Implementation

EPM works in NRM both from the top down and from the bottom up, with varying points of entry into the NRM continuum. The formal initiation of EPM involvement in the NRM process is largely a function of client request, with the requestor usually being A.I.D. or the World Bank. Increasingly the Center is able to influence to some extent the location and nature of requests.

Constraints on implementation include limited USAID mission understanding of the capabilities and limitations of EPM. Limited S&T/FENR travel funds and A.I.D. staff time for more substantive involvement in EPM diminish the potential of EPM as an instrument of learning and influence within S&T and A.I.D. In addition, the A.I.D. practice of using the EPM project for channeling NRM funding extraneous to the EPM cooperative agreement diminishes the time and attention that the S&T/FENR project manager has for substantive involvement with the Center.

There is no systematic evaluation system within the EPM project for assessing impact of EPM work on institutional strengthening for NRM in developing countries or for gauging whether the NRM activities themselves contribute to the developmental or environmental goals of the EPM project.

The evaluation determined that the Center is in essential compliance with EPM cooperative agreement commitments concerning outputs and project administration. The Center is a soundly managed and functioning organization. The merger with WRI is essentially and successfully completed. The structure and management capacity and style of the Center are well suited for implementation of EPM.

Principal Center weaknesses determined by the evaluation are absence of a program evaluation system, gaps in staffing policies

and procedures (including in such matters as geographical balance as well as women and minority representation), and lack of a clear publications strategy for EPM documents.

RECOMMENDATIONS

In major part, the following recommendations are drawn from Sections III -VI.

1. There should be an EPM II. Its principal focus should be upon supporting the development of institutional capacity for NRM in developing countries. Salient features should be host country institutional ownership of the NRM processes and public participation at the grassroots level. EPM II project design should also explicitly examine incorporation of urban and environmental concerns into the problems to be addressed by the project.

2. The current EPM NRMSA theme could, with some broadening, be made the overall framework of EPM II. The next EPM should seek to play an active role in influencing regional, national, and subnational natural resource and environmental plans to adopt the participatory, national institution building, bottom-up/top-down NRM linkages, and action-orientation that are the current hallmarks of EPM.

3. EPM II should consider assistance to developing countries in monitoring and evaluating NRMSA development and implementation efforts. The objective would be to illuminate and influence the extent to which NRM policies and plans are ultimately reflected in development and environmental benefits.

4. Development of a specific strategy for NGO-related research and information and dissemination should be given top priority in EPM II. Design studies should also explore the extent to which the project, mostly likely through NGOs, can support public information and education as a strategy to influence NRM policies and plans.

5. EPM II should continue to refine and validate the participatory tools of EPM, including the PRA methodology and the FGU analytical and study approaches. EPM II should consider expanded use of these tools, for example for new stakeholders (e.g., women and children) and new NRM issues (e.g., urban and pollution issues).

6. The NRDM program theme work should be continued and expanded in EPM II, and should be more actively related to the overall purpose of supporting developing country institutional capacity to compile, gain access to, analyze, and use natural resources data in development planning.

7. An EPM II NRDM program should seek to close the gap between state-of-the art information and data systems and their genuine utility for NRM at the national and subnational levels in developing countries.

8. EPM II should include a sustainable agriculture element generally along the lines currently being designed by the Center. Such an element in EPM II should be considered complementary to other A.I.D. projects specifically aimed at sustainable agriculture. EPM II design should consider folding sustainable agriculture, biodiversity conservation and tropical forestry into a single theme or program area. The overall scope of this program area would be sustainable land use with a focus on methodologies to meet human needs sustainably, through improved NRM planning.

9. Attention to gender specific constraints to NRM, both at the grassroots as well as at the policy levels, should be a central part of the design of EPM II. The new project should develop a specific gender framework for NRM.

10. The cooperative agreement mode should be considered as the financing instrument for EPM II as a means of ensuring a blending of the mutual A.I.D. and Center objectives. Regional and USAID mission buy-in features of EPM should be continued in the follow-on project. The EPM II design effort should pay particular attention to clarity in definition of project objectives and a strategy for marketing EPM to regional bureaus and USAID missions, providing guidance on the germaneness of requests for EPM II participation and criteria for EPM management in determining appropriate response to requests.

11. The unaccomplished 1989 management study should be revisited and incorporated into a strategic planning exercise by the Center as part of its design and preparation for EPM II. This study would be particularly relevant to determining assistance elements required to strengthen the Center as an institution.

12. EPM II design should emphasize development of a program evaluation system to enable EPM management to assess and plan for attainment of project purposes.

13. EPM II design should examine means to increase S&T/FENR substantive involvement in the project. This should include elimination of constraints on project effectiveness occasioned by substantial use of the project for purposes extraneous to the cooperative agreement.

LIST OF ABBREVIATIONS

AAAS	American Association for the Advancement of Science
A.I.D.	Agency for International Development. Refers to Agency as a whole and, in certain contexts, to Washington headquarters
BSP	Biodiversity Support Program, A.I.D.-funded joint program of WWF, TNC, and the Center; also, program theme of WRI and the Center
CBD	Conservation of Biological Diversity Project (A.I.D. Project No. 936-5554)
CDSS	Country development strategy statement, USAID Mission planning document
CEP	Country environmental profile, national environment and natural resource assessment document
CES	Country environmental study, national environment and natural resource assessment document
CIDA	Canadian International Development Agency
CIDE	Center for International Development and Environment, part of WRI; referred to in evaluation report as "the Center"
CRSP	Collaborative research support program
EIA	Environmental impact assessment (generic term)
ENR	Environment and natural resources (generic term)
ENRIC	Environmental and Natural Resources Information Center proposed by A.I.D.
EPM	Environmental Planning and Management Project (Project No. 936-5517)
EPM II	Proposed follow-on project to EPM
FAO	Food and Agriculture Organization
FGU	From-the-Ground-Up, Center NGO case study program
FORIM	Forum on Natural Resources Information Management
GIS	Geographic information system (generic term)
IIED	International Institute for Environment and Development. Also referred to as IIED/London where IIED is headquartered, to distinguish from IIED/NA
IIED/NA	IIED North America office, EPM cooperative agreement recipient until 1988 when merged into WRI as CIDE
INTERAISE	International Environmental and Natural Resource Assessment Information Service
IPT	Integrated planning technology, model for ENR planning
IUCN	International Union for the Conservation of Nature, NGO based in Gland, Switzerland, also known as World Conservation Union
NCS	National conservation strategy, national environment and natural resource planning document of IUCN
NEAP	National environment and natural resource planning document of the World Bank
NGO	Non-governmental organization
NRDM	Natural resource data management, program theme area of

EPM, sometimes also used as generic term
NRM Natural resource management (generic term)
NRMAA Natural resource management assessments and analyses,
 EPM program theme area until 1990 when changed to NRMSA
NRMSA Natural resource management strategies and assessments,
 program theme area of EPM, sometimes also used as
 generic term
PD&S Program development and support funds (A.I.D.)
PPC/CDIE A.I.D. Bureau for Program and Policy Coordination,
 Center for Development Information and Evaluation
PRA Participatory rural appraisal, grassroots assessment
 method
RENARM Regional Natural Resources Management Project,
 administered by ROCAP
ROCAP A.I.D. regional office for Central America and Panama,
 located in Guatemala City, Guatemala
RRA Rapid rural appraisal, an assessment method
SA Sustainable agriculture, program theme area of EPM,
 sometimes also used as generic term
S&T/FENR A.I.D. Bureau for Science and Technology, Office of
 Forestry, Environment and Natural Resources
TFAP Tropical Forestry Action Plan of FAO
TFLU Tropical forestry and land use, WRI program area
TNC The Nature Conservancy
TOR Terms of reference for EPM final evaluation
UN United Nations
UNCED United Nations Conference on the Environment and
 Development, Brazil 1992
UNDP United Nations Development Programme
USAID A.I.D. field mission
WRI World Resources Institute
WRR World Resources Report, publication of WRI

ENVIRONMENTAL PLANNING AND MANAGEMENT PROJECT (EPM)

(Project No. 936-5517)

Final Evaluation (July 1, 1991)

I. Background to Evaluation

This evaluation concerns the Environmental Planning and Management Project (EPM), established in 1982 by the A.I.D. Bureau for Science and Technology, Office of Forestry, Environment and Natural Resources (S&T/FENR). The Project is implemented through a Cooperative Agreement (LAC-5517-A-00-5077-00) between S&T/FENR and the World Resources Institute (WRI), whose Center for International Development and Environment (Center) is responsible for carrying out the activities of the project. The Center is successor in interest to the original grantee under the 1982 Cooperative Agreement, the International Institute for Environment and Development-North America (IIED/NA), which merged with WRI in 1988.

A Revised Cooperative Agreement was executed in July 1985, and it is this Agreement and its amendments that are the focus of this evaluation. The EPM project underwent a further major revision by Project Paper Supplement in March 1989. Through these revisions, EPM has been renewed and expanded and now has a project authorization completion date of August 26, 1992. Total project authorization for the 1985 Cooperative Agreement is \$11,340,038, of which \$5,474,038 is core funding and a buy-in ceiling of \$5,866,000.

The project goal is to promote long-term sustainable development through improved natural resources management (NRM) and planning. The purpose of the EPM project is to strengthen the capabilities of public and private institutions in developing countries to better manage and conserve their natural resources by incorporating NRM into development planning. The project's 1982 logical framework matrix (Appendix 1) was not rewritten with the 1985 and 1989 project revisions. However, analysis (Appendix 2) of these revisions and of annual Center work plans traces the concurrence of A.I.D. and the Center in refinements to the project's purpose statement.

The EPM project addresses its purpose by activities under four inter-related program themes:

- natural resource management strategies and assessments (NRMSA)
- non-governmental organization support (NGO)
- natural resource data management (NRDM)
- sustainable agricultural development (SA)

In addition, the project has also addressed biodiversity

conservation and tropical forestry and landuse (TFLU) concerns.

Examples of the types of activities supported by EPM under each of these theme areas are as follows:

1. **Natural resource management strategies and assessments (NRMSA):** Support for country environmental profiles in Paraguay, Colombia, the Central American region, Thailand and Jamaica; contribution to development of World Bank/A.I.D. Environmental Action Plans in Rwanda, Madagascar and Guinea; preparation of Resource Assessments in Bangladesh and Indonesia; Tropical Forestry and Biodiversity Assessments in Guatemala, Ecuador and the Eastern Caribbean; preparation of Environment and Natural Resources (ENR) Strategies for the Asia and Near East and Latin America and Caribbean regional bureaus and for USAID/Chile; and policy advice to the Central American Commission on Environment and Development.
2. **NGO support:** Provision of management advice, technical support and direct grants to NGOs in South and Central America; support for the From the Group Up program (the Center's community-based NRM studies in 13 African countries); support for Haribon Foundation in the Philippines; and conduct of Participatory Rural Appraisal (PRA) workshops for NGOs.
3. **Natural resource data management:** Preparation of indicators for monitoring trends in natural resource use and degradation in Africa, Latin America, and Asia; compilation and publication of the 1990 Directory of Country Environmental Studies; development and application of the Integrated Planning Technology (IPT) model for NRM planning; and support to A.I.D./Washington on Congressional reporting and information center design.
4. **Sustainable agricultural (SA) development:** Support for policy research and publications dissemination on sustainable agriculture policy and methodologies through IIED/London; conduct of Rapid Rural Appraisal and Agro-ecosystems Analysis workshops in Thailand, Indonesia, Phillipines and for A.I.D. and NGO staff in Washington; and integration of sustainable agricultural components into ENR strategies for Latin America and Caribbean and Asia and Near East regions.
5. **Biodiversity conservation:** Assistance in planning conservation activities; support for development of the S&T/FENR Biodiversity Support Program (a consortium in which the Center is a partner with the World Wildlife

Fund and the Nature Conservancy); evaluation of systematic approaches to setting priorities for biodiversity conservation; and analysis of U.S. support for biodiversity research and conservation.

6. Tropical forestry and landuse (TFLU): Support to developing country governments and NGOs on policies affecting tropical forests; support of indigenous NGO participation in the Tropical Forestry Action Plans at the country level with focus on increasing public participation, attention to forest dwellers whose livelihoods depend on the forest, tenure issues and the role of indigenous people; and assessment of the progress made in implementing TFAP over the past five years.

The level and range of EPM activities carried out by the Center since the revised 1985 Cooperative Agreement are reviewed in the figures 1-6 (prepared by the Center).

- Through FY 1990, the Center spent a total of \$9,344,244 in EPM funds, of which 64% were S&T/FENR core funding and 36% was A.I.D. regional bureau and USAID mission buy-ins (Figure 1);
- Project activities were carried out in 53 countries: 24 in Africa, 14 in Asia/Near East, 15 in Latin America and the Caribbean (Figures 2, 3);
- Regional Bureau and USAID buy-ins were relatively evenly distributed over the grant period as a whole, although there were significant regional variations from year to year (Figures 4, 5);
- Core funding of EPM activities was relatively constant over the grant period since 1985 (ranging from \$800,000 to \$1,300,000 annually), while the levels of buy-ins showed enormous growth in the last three years and now regularly equal core funding (Figure 6)

A summary listing of each of the principal program activities carried out with full or partial EPM support is provided in Appendix 3. Each activity in this listing is more fully described in a supplementary appendix volume accompanying this report. A listing of EPM-supported documents produced by the Center arranged by country and region involved is provided in Appendix 4. (Documents generated through EPM funding but produced by parties other than the Center are referenced in Appendix 3; see, for example, sections concerning Sustainable Agriculture and NGO Policy Support Activities.)

**The World Resources Institute
Center For International Development and Environment**

**Environmental Planning and Management Project
Funding History ***

Funding Source	FY 1985	FY 1986	FY 1987	FY 1988	FY 1989	FY 1990	TOTAL	Percent
S&T/FENR Core	865,000 a	855,000 b	1,149,000 c	915,000	818,000	1,356,000 e	5,958,000	64%
Bureau & Mission Buy-ins	224,116	146,453	57,979	494,704	1,205,687 d	1,258,305	3,386,244	36%
Total	1,089,116	1,000,453	1,206,979	1,409,704	2,023,687	2,614,305	9,344,244	100%

* EPM Co-op Agreement LAC 5517-A-DO-5077

a) Includes \$250,000 carryover from EPM (DAN 5517-A-00-2066)

b) Includes \$37,995 for Nepal

c) Includes \$270,000 for initiation of Biological Diversity activities

d) Includes \$309,000 FENR Buy-in for Biological Resource Conservation Activities

e) Includes \$284,000 for Global Climate Change activities

**WORLD RESOURCES INSTITUTE -
CENTER FOR INTERNATIONAL DEVELOPMENT AND ENVIRONMENT
Geographic Distribution of EPM Activities
(1985-1991)**

	AFRICA	ASIA/NEAR EAST	LAC	OTHER
RESOURCE ASSESSMENTS	Botswana Burkina Faso Cameroon Gambia Ghana Guinea Kenya Liberia Madagascar Mali Mauritius Morocco Nigeria Rwanda Senegal Sierra Leone Sudan Tanzania Uganda Zaire Zimbabwe AFRICA Region	Fiji Bangladesh Indonesia Jordan Nepal Papua New Guinea Philippines Solomon Islands Sri Lanka Thailand China	Barbados Jamaica Haiti E. CARIB Region Bolivia Chile Colombia Costa Rica Guatemala Honduras Mexico Panama Paraguay Peru C. AMER Region LAC Region	Ireland Canada United States
NATURAL RESOURCE DATA MANAGEMENT	Botswana Ghana Kenya Namibia Morocco Zimbabwe	India Nepal Philippines Sri Lanka Thailand	Costa Rica	Switzerland United Kingdom United States
NGO	Ghana Kenya Somalia Sudan Tanzania Tunisia	Indonesia Philippines Thailand Turkey Greece Mediterranean	Haiti Bolivia Costa Rica Ecuador Guatemala Honduras Mexico Paraguay Peru	United States
BIODIVERSITY		Bangladesh India Philippines	Jamaica CARIB Region Chile Costa Rica Ecuador Guatemala	United States
SUSTAINABLE AGRICULTURE		Indonesia Philippines Thailand	Dominican Rep.	United Kingdom United States

**World Resources Institute
Center for International Development and Environment
EPM Project Activities (1985 - 91)**

Program	Africa	Asia/ Near East	Latin Am./ Caribbean	Global	U.S.	TOTAL
Biodiversity	1	11	5	10	0	30
Forestry and Land Use	(2)	(3)	(4)	(6)	(0)	(15)*
Natural Resources Data Management	12	10	0	14	2	38
NGO Support/NGO Policy Implements	22	10	22	8	3	52
Resource Assessments	41	19	40	7	2	122
Sustainable Agriculture	0	9	1	8	1	19
TOTAL	76	59	71	47	8	261

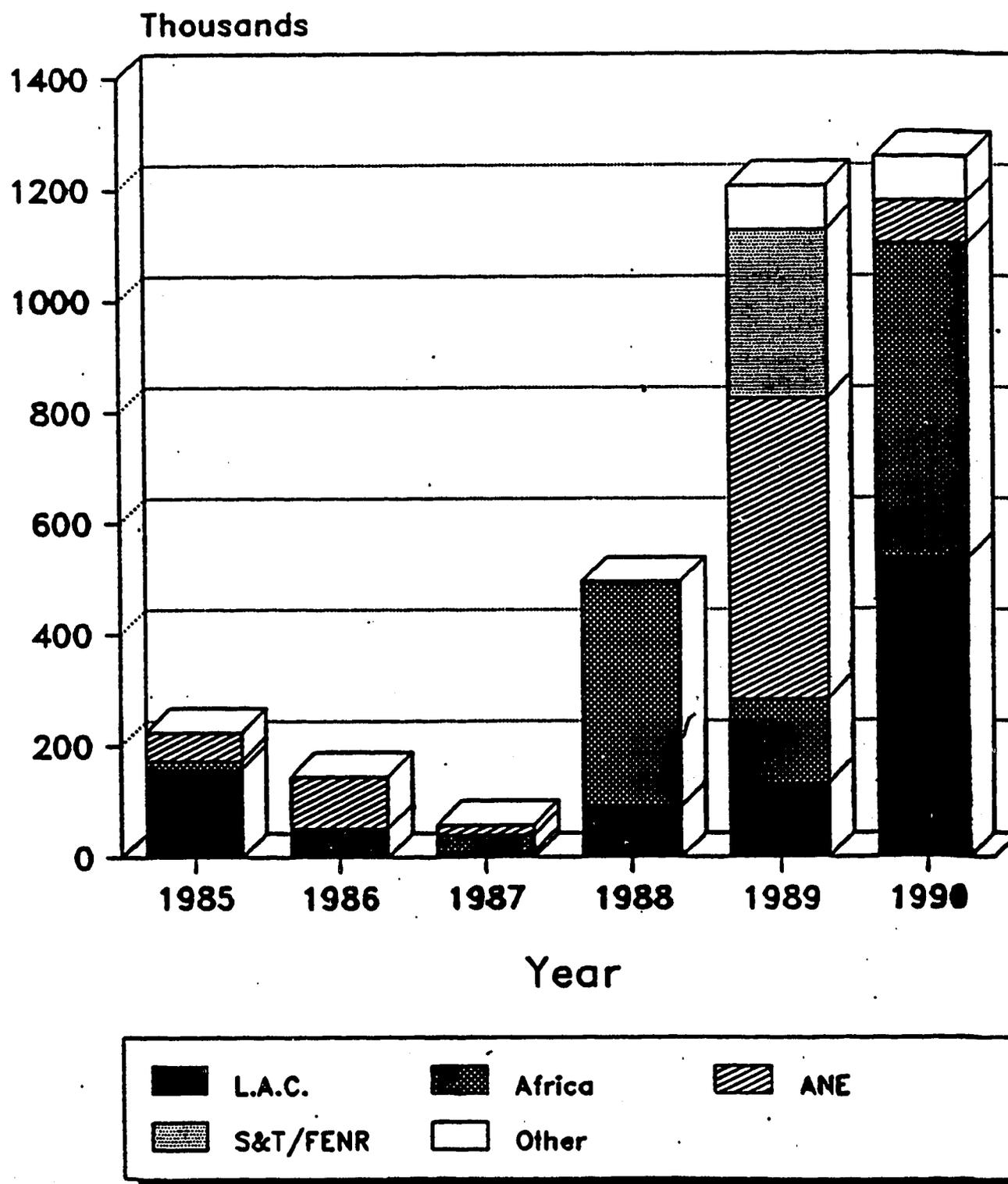
* Numbers in parentheses are not included in project totals

1991

Figure 4

The World Resources Institute
Center for International Development and Environment

EPM II Funding Analysis
Buy-in Obligations by Region



The World Resources Institute
Center for International Development and Environment

EPM Funding Analysis
Regional Distribution of Buy-ins

Regional Bureau/ Mission	FY 1985	FY 1986	FY 1987	FY 1988	FY 1989	FY 1990	TOTAL	Percent
L.A.C..	189,076	82,405	10,830	90,863 b	132,766	538,722	984,662	29%
Africa	16,040		29,993	403,842	150,000 c	564,583	1,163,458	34%
ANE	60,000	93,048 a	17,156		540,684	75,000	775,888	23%
S&T/FENR					303,000		303,000	9%
Other *					79,237	80,000	159,237	5%
TOTAL	224,116	145,453	57,979	494,705	1,205,687	1,258,305	3,386,245	100%

* PRE/H

a) Additional \$37,995 included in Core Funding to cover NEPAL

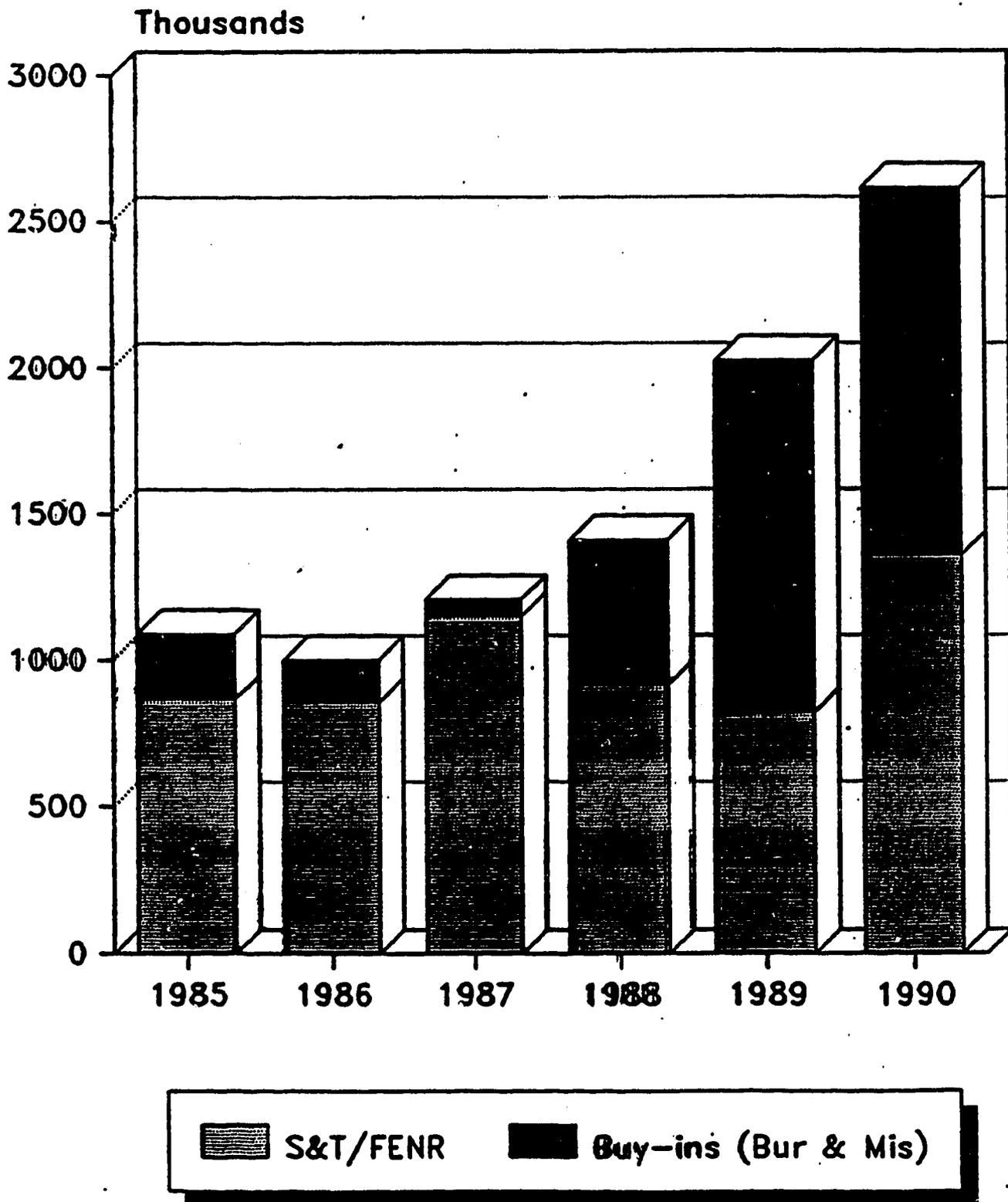
b) Additional direct contract funds from LAC/E. Caribbean Biodiversity Strategy (\$75,000) + Colombia (\$21,000)

c) Excludes \$40,000 direct contract Rwanda Mission

Figure 6

The World Resources Institute
Center for International Development and Environment

EPM II Funding Analysis
S&T/FENR Core vs. Bureau & Mission Buy-ins



II. Purpose and Method of the Final Evaluation

This evaluation has been undertaken within the framework of A.I.D. Handbook 3, Chapter 12 as supplemented by A.I.D. Evaluation Handbook (April 1987 TM 3S:15). The evaluation terms of reference (TOR, Appendix 5) were prepared collaboratively by S&T/FENR and the Center, with the assistance of the EPM project advisory committee and the Center for Development Information and Evaluation of the Bureau for Program and Policy Coordination (PPC/CDIE). The TOR states (Appendix 5, p. 5) that the evaluation is to focus on EPM since its restructuring in 1985. The purpose of the evaluation (Appendix 5, p. 3) is to

1. determine EPM contribution to mutual A.I.D. and Center NRM objectives;
2. determine project accomplishments in strengthening developing country institutions to identify, analyze, and respond effectively to current and emerging environmental issues; and
3. gain insights from EPM relative to a possible follow-on project as well as other A.I.D. centrally-funded projects addressing institution building and policy issues related to natural resources and environmental management.

The TOR (Appendix 5) poses some 50 specific questions concerning:

1. progress made in addressing overarching issues in NRM,
2. progress made in the four EPM theme areas towards theme-specific objectives,
3. impact of the cooperative agreement mode on the project implementors,
4. constraints and opportunities inherent in the design and management of the project, and
5. guidance and recommendations for design of the follow-on EPM II project based on the major lessons learned under EPM.

In addition, as with all S&T evaluations, questions are posed on cross-cutting evaluation themes of cost-sharing, buy-ins, sustainability, women in development, peer review, and information collection and dissemination.

The evaluation team consisted of Dr. Arthur Hanson (team leader, external consultant), Mr. John Rigby (external consultant), Dr. John Swallow (S&T/FENR), and Dr. Cynthia L. Jensen (AAAS Fellow, S&T/FENR). Dr. Hanson is a senior resource planning and policy specialist, while Mr. Rigby is an institutional specialist. Dr. Swallow is a career A.I.D. officer with extensive experience in institutional analysis, human resources development, NGO and private sector support and general rural development. Dr. Jensen is an ecologist and has been associated with S&T/FENR since 1988.

from this role for family reasons. In June, Mr. Rigby assumed the function of coordinating report preparation.

Over a four week period in March-April, the evaluation team worked in Washington, DC, reviewing project documents and holding in-depth discussions with staff from the Center, A.I.D., the World Bank and NGOs. In April-May team members traveled to nine countries to examine project activities in detail and for field testing/verification of data generated by the Washington study. Dr. Jensen and Mr. Rigby visited Rwanda, Ghana, Kenya, Nepal and Thailand. Dr. Swallow travelled to Bolivia, Honduras, Guatemala and Chile. Separate country reports from the evaluation team field visits are annexed as Appendix 6.

All USAID field missions that have had EPM activities since 1985 were contacted by cable and asked to comment on EPM activities in their countries (Appendix 7).

Data upon which evaluation findings and conclusions are based were obtained in Washington and the field visits from

1. review of reports, documents and project files (Appendix 8, list of documents consulted)
2. interviews with Center staff, EPM contractors, S&T/FENR project management staff, A.I.D. regional bureau and other central bureau personnel, USAID field mission staff, developing country government officials and representatives of U.S. and developing country NGOs (Appendix 8, list of people interviewed)
3. USAID mission responses to the evaluation cable inquiry, with feedback from 42 USAID missions through a combination of cable responses and in-person or telephone interviews.

III. Evaluation of the Principal EPM Program Themes

A. NRM Strategies and Assessments

1. Introduction

From 1985 through 1990, NRMSA theme activities supported by EPM have been undertaken in 22 countries in Africa (plus one regional program), 11 countries in Asia/Near East, and 13 countries (plus three regional programs) in Latin America and the Caribbean. Of the 261 EPM activities and projects undertaken by the Center in the 1985-1990 period, 122 (or 47%) have been NRMSA related, almost three times that of any other single theme area. (Figure 3)

The 1985 revised Cooperative Agreement described an EPM natural resource planning and assessment theme aiming

"[to] develop improved approaches to country environmental profiling...and specifically addressing methods and programs for supporting the implementation of strategies for the sustainable use of natural resources in the [EPM] countries...."

After program theme refinement by the Center and S&T/FENR reflected in 1986-1988 annual work plans, the NRMSA purpose was defined in the 1989 Project Paper Supplement as being

"to strengthen the capabilities of public and private institutions in developing countries to better manage and conserve their natural resources for long-term sustainable development."

(See, also, Appendix 2 concerning evolution of NRMSA objectives over the course of EPM.)

The different types of NRMSA activities supported under the EPM project include:

1. Environmental profiles
 - Regional environmental profiles
 - Country environmental profiles
 - Subnational environmental profiles
2. Natural resource assessments
 - Country natural resource assessment
 - Country biodiversity and tropical forest assessments
3. Environmental strategies and action plans
 - A.I.D. regional bureau environmental strategies
 - Regional environmental strategies
 - Country environmental strategies

- World Bank National Environmental Action Plans
- IUCN National Conservation Strategies

The evaluation TOR poses a series of specific questions (Appendix 5, pp. 6-7) concerning the components, approaches, and results of EPM's work under the NRMSA theme, addressed below. As discussed, it is the view of the evaluation team that the NRMSA activities to a large extent encompass the broad range of the intended scope of EPM.

2. Findings

(a) Contributions to NRM planning

(i) The process and products yielded by NRMSA: The NRMSA program has supported developing country NRM planning both through generation of products (assessments, profiles, strategies, plans, reports, publications and tested methodologies) and processes (the series of operations and actions that support NRM decisions, from policy through implementation). For ease of language, this variety of products and processes is referred to as "NRM planning" in this report, even though they are not all technically plans. Also, EPM activities in support of NRM planning is referred to as "NRMSA approaches" even though the activities often invoke EPM program themes other than NRMSA.

NRM planning supported under the project culminates in published documents. (Appendix 4) For example, the evaluation team studied the full range of EPM-supported national planning documents in Rwanda, Ghana, Chile, and Thailand. The field visit interviews with the developing country participants revealed that these documents are valued for the quality and scope of their information; their use in educating the general public, environmental professionals, NGOs and government officials on NRM issues; the extent to which they serve as conceptual models for NRM planning; as potential frameworks for government environmental programs; or directly as government-approved policy.

(ii) Institutional strengthening: The process of conducting a NRM plan can have value as a capacity-building experience. In the national level NRMSA activities examined by the evaluation team, there was consistent evidence that the EPM supported planning effort enhanced participants' professional standing: this applied at governmental level (e.g., Chile, Bolivia, Rwanda, Ghana) and NGO level (e.g., Rwanda, Ghana). In some cases (e.g., Bolivia, Rwanda, Nepal), the establishment of permanent and budgeted government NRM entities can be directly attributable to NRMSA processes in which EPM had a pivotal role.

The Center has developed useful criteria to determine whether NRM

planning has been institutionalized. These are set out in a Center publication (Arensberg, W. 1990.) This approach views NRM plans under NRMSA as "instruments of change", a process which effectively leads countries through a new set of institutional behaviors supporting NRM planning, such as data collection and analysis, identification of priority problems, recognition of priority needs, development of recommendations regarding priority actions, and creation of appropriate legislation, policies and institutional mandates to effectively implement actions.

The evaluation field visits provided opportunity for some direct examination of the institutional impact of NRMSA in some countries. Appendix 10 is an EPM evaluation team case study addressing the institutional impact questions to NRMSA involvement in three countries visited by members of the evaluation team. These are Rwanda and Ghana, where the Center assisted in developing National Environmental Action Plans (NEAPs), and Nepal, where EPM (with funds channeled through the Center to IUCN) provided early and timely assistance in the development of a National Conservation Strategy (NCS). The evidence available in these three countries, and reviewed in Appendix 10, confirms that EPM and NRMSA contributed to:

1. formulation of policies
2. creation and/or strengthening of NRM institutions
3. multi-sectoral coordination
4. capacity for natural resources data management and environmental impact assessment
5. mechanisms for private sector/NGO participation in NRM .

(b) Operational levels

Center efforts typically have been highly targetted at specific gaps in the process of conducting NRM plans. It has been especially active in helping to design the NRM plan, in looking to increase public participation, and in strengthening ownership of the process by relevant developing country institutions. Often the Center is working within a larger context of several developing country institutions, NGOs and government agencies, as well as multiple donors. In these situations the Center frequently plays the role of liaising among players, facilitating communication and collaboration, and brokering interest and resources. In a few cases the Center has been involved in most aspects of a plan, such as in Chile where the Center served almost in the capacity of management consultant to the National Commission for the Environment, or in Rwanda where the Center was the pivotal catalyst for linking Governmental, NGO, community, and donor (e.g., World Bank and USAID) participation in national planning efforts. The Center is careful to convey to collaborators in developing countries that it is not itself a donor organization. However, the Center often assists partner NGOs and other institutions in pursuing external sources of

support from foundations and other donors.

The role the Center assumes can be characterized as "strategic but limited." When the Center is asked to assist in a NRMSA effort, in most cases the Center meets a pre-existing set of actors, historical circumstances, needs, and conditions within which it must fit. The Center does not have a free choice of points of entry but must judge this based on its perceptions of its options. The Center chooses to enter the process at the weakest point where help is most needed.

EPM's contributions to NRM have been accomplished through strategic interventions at various levels in NRM processes (regional, national, and local) and with a variety of resources (funding, technical assistance, analytical tools, data) which have contributed to the quality of NRM. According to Center documents examined by the evaluation team, approximately 15% of NRMSA plans were regional in scope, 60% were national and 25% were at the local level. EPM experience provides evidence that NRM is needed at multiple levels, from the village level to national and regional levels for particular issues and resources. The appropriate approach will vary as a function of the level at which a plan is targeted. In countries where NRM has been attempted at several levels, it has become evident that these NRM plans need to be linked to each other.

(c) Participatory approaches

The Center's 1986 work plan noted (p. 7) that a major weakness of EPM's involvement in environmental profiles and conservation strategies was that "a failure to fully involve local institutions and expertise has reduced their effectiveness in development planning and national policies."

The evaluation team found strong evidence that the Center's approach to NRM planning has (1) strengthened developing country ownership of the process, and (2) strengthened public participation at the grassroots level, usually through involvement of NGOs in the NRMSA process (see, e.g., Appendix 6 and Appendix 10). In one case, in Sri Lanka, local ownership of its NCS was explicitly nurtured by the Center, even though this approach slowed the process considerably. Forty to fifty Sri Lankans, including high level government officials, were involved in the planning process. This strong sense of local ownership helped attract highly qualified Sri Lankans to write the background documents.

The Center has attempted to strengthen NRM grassroots participation by "building an NGO program whose central theme is participation, analyzing the quality of an NRM planning process from the point of view of participation, by allying the Center with organizations promoting participation, publishing a series

of thoughtful guides on participation, and developing a field research tool which requires it, namely PRA (Briefing Book 1991)." A key approach to promoting participation has been stakeholder analysis, which seeks to identify the key, missing stakeholders, for example, women or indigenous people. The project has found that NGOs can be effective representatives of these important, missing stakeholders. A major lesson learned has been that the involvement of NGOs and other representatives of stakeholders from the effort's beginning can enhance the eventual acceptance and implementation of the plan. NGOs have been particularly effective in village-level NRM planning, especially through the use of Participatory Rural Appraisal.

(d) Results and follow-on

(i) What happened to completed plans? Official recognition by the developing country government is planned and sought for NRM plans. For example, in Rwanda and in Ghana the National Environmental Action Plans have been submitted to the government and approval is pending. In Nepal, full government approval and support have been obtained through keeping the royal family and high-level government officials informed throughout the planning process.

Most NRMSA efforts have been associated with extensive follow-on activities, although only in a few cases have the Center and EPM been involved in these actions. In most cases it is difficult to attribute the follow-on actions to EPM because typically the Center's role has been "strategic but limited" within the context of a multi-donor, multi-institutional, multi-factor process.

Planning for follow-on actions is an explicit objective of the recent NRMSA plans. Many countries that benefitted from earlier profiling efforts are now updating their environmental profiles or are developing strategies and action plans that build on the information base developed under the profile. Implementing agencies for the plans, in the countries visited during the evaluation country visits, expressed their understanding of the strategy and action plan efforts as continuing processes. Priority problems and actions need to be periodically revised. In several instances assessments and strategies are being updated and/or the developing country institution is committed to revising the plan on a periodic basis.

The EPM project has not attempted to systematically document the extent to which NRM plans have been disseminated or the extent to which they have been successfully implemented. Actual impact is difficult to assess, because it entails examining the extent to which the NRM planning has been institutionalized within a country. Assessing this impact is difficult, because it is a long-term process during which many other factors and agents come into play. In effect it is a multi-factoral process, under which

EPM is but one factor.

(ii) Audiences: Early efforts to conduct environmental profiles were often attempts to inform and educate the general public as well as technical people in the environmental sector. To this end plans were broadly disseminated. For example, the Thailand Resources Profile from 1986 has remained in high demand by professionals and students and is sold in commercial outlets; a reprint is planned for 1991 to meet continuing demand. The Turkey Resources Profile is in its fifth edition.

The National Environmental Action Plans that are being undertaken in Africa are often done under the shadow of a large-scale investment plan brokered by the World Bank. In this case one audience is the community of development agencies and development banks. In Ghana and in Rwanda, donor roundtables are expected to be convened to address the priority actions identified in the plans. Bolivia's Environmental Action Plan will be the focus of a consultative group meeting in July, 1991.

Some plans have been undertaken specifically for A.I.D., either for a regional bureau or a country mission. Environmental strategies for the Asia, Near East Bureau and the Latin America and Caribbean Bureau have been undertaken by the Center. Several natural resource assessments have been inspired by the A.I.D. planning process, and assessments have been completed primarily to fulfill a requirement for mission planning purposes. For example, the Bangladesh natural resources assessment was primarily conducted for the mission's Country Development Strategy Statement. The degree to which the information and recommendations completed in this type of plan has resulted in follow-on actions has been a function of the readiness of the requesting office to act upon -- as opposed to merely report on - the plan.

(iii) Capturing and building on knowledge of NRMSA: The Center has directly supported approximately 140 NRM plans. Beyond the country-specific uses of the plans for decisions and actions, the primary beneficiary of this cumulative body of knowledge and experience is the Center itself and the EPM project. The Center's operating style is one of continually building on experience. Each NRMSA effort informs the next. The extent to which the NRMSA program has evolved through the project's nine-year history is evidence of the Center's capacity to refine its methodologies and priorities based on experience. The Center staff build and value collaborative relationships among themselves, resulting in clear examples of cross-fertilization. Within the Center knowledge and experience appear to be captured and transferred as a mode of operation.

Experience and knowledge gained have been captured in a large body of specific project documents (see Appendix 4) tailored to

the "client" and audience at hand. There are numerous examples of specific project documents reaching wider audiences and becoming valuable outside of the project context. For example, USAID/Bangladesh reported that their natural resources assessment has been used extensively by the media to publicize environmental degradation in Bangladesh and by the World Bank to prepare its country environmental strategy.

To a smaller degree, the Center explicitly has packaged its expertise for external but highly targetted audiences, for example in the PRA Handbook and the Gatekeeper series on sustainable agriculture. Although there are demands and opportunities to publish the Center's experiences, methodologies and overview of the critical issues for external audiences, such an effort typically needs to be an explicit program of a project with requisite staff and publishing resources, which EPM does not have. Capturing the knowledge and experience within the project and among the project staff, for the purpose of strengthening the project during the course of its implementation, should continue to have higher priority, unless A.I.D. allocates explicit funds for dissemination of project results and knowledge to a broader audience.

(iv) The strategic but limited rôle of the Center in NRMSA activities prevents the Center from taking on an extensive role in follow-on actions. This places the Center in a weak position to assess the impact of its contribution as well as the plan in general. Although impact assessment of activities is not an explicit objective of the NRMSA program area, the Center's learning approach and program development may be disadvantaged by this lack of opportunity for a longer-term relationship to plan implementation.

3. Conclusions

(a) NRMSA approaches are:

1. participatory -- identifying and involving in the NRM process relatively hidden or underrepresented stakeholders, as well as illuminating relevant but buried issues; the participatory nature of EPM approaches not only increases the likelihood of equity in NRM policy formulation but also equity and effectiveness in policy implementation;
2. flexible -- filling gaps in financial resources, technical skills to advance NRM processes on a policy-planning-action continuum;
3. collaborative -- linking relevant local, national, international, technical, non-technical, governmental, non-governmental players;

4. supportive of national capacity with emphasis on promoting national and local control of decisions and resources employed in NRM activities;
5. generally client-responsive in matters directly or indirectly related to EPM where clients are USAID missions, Regional A.I.D. Bureaus, multi-lateral development agencies or banks such as World Bank and the UN family of organizations and some U.S. foundations.

(Not all EPM efforts supporting NRM planning embody each of these attributes, but they are increasingly consistent characteristics of all of the EPM program theme activities.)

(b) The NRMSA theme area program works under the assumptions that:

1. Marshalling environmental information and making it available to decision-makers will improve environmental policies.
2. Better environmental policies will result in improved NRM and planning.
3. Participatory approaches -- particularly those linking grassroot knowledge and needs with policy efforts -- will generate better informed NRM policies and plans and will increase the likelihood of effective follow-on actions.
4. Improved NRM and planning will directly improve the quality of life of those people dependent on natural resources and will have the subsequent effect of improved environmental conditions and increased sustainability of economic development.

The evaluation team's examination of NRMSA planning documents and experience, supplemented by the field visit observations, support the team's conclusion that these assumptions are tenable. The demand for natural resource profiles, plans, strategies and assessments has increased consistently since the beginning of the EPM project. The recognition of the type of NRM planning needed has evolved through time, and EPM has responded by assisting with a variety of efforts. The evolution has been from profiling efforts that were descriptive to efforts to formulate strategies and action plans for implementation.

(c) Center implementation of EPM since 1985 reflects an increasing understanding of the practical linkages between NRM and economic development by the Center and thereby an increasing ability to help developing countries integrate natural resource management into development planning. The evolution from a descriptive to a strategic approach has been a conscious one, although it has required sensitivity and responsiveness to

conditions over which the Center has no control. The Center's own approach of "learning by doing" has facilitated continued change.

(d) Strategies and assessments are now planned by the Center, or with the Center's assistance, with a view to increasing the probability that they will be implemented successfully. Throughout EPM's nine-year history the Center has learned that strategic plans are more likely to be implemented and result in actions than profiles that primarily seek to increase public awareness and to disseminate knowledge. The role of the Center has been to assist in scoping out the work involved in a strategy or assessment effort, suggesting appropriate methodologies, and looking for and bringing to the effort the missing, critical stakeholders.

(e) Through NRMSA activities, EPM has:

1. Strengthened developing country capacity to engage in NRM.
2. Assisted in designing, conducting, and implementing a variety of natural resource assessments and strategies and facilitated follow-on actions.
3. Developed and tested methodologies and innovative techniques to enhance NRM.
4. Strengthened the capacity of the Center to assist A.I.D. in supporting NRM in developing countries and to provide leadership and expertise to other development agencies and NGOs engaged in similar efforts.
5. Improved A.I.D.'s understanding of limiting technical, social, economic, and institutional factors in NRM.

(f) In summary, under the NRMSA theme, EPM has made substantial progress towards helping to strengthen the capabilities of public and private institutions in developing countries to better manage and conserve their natural resources. EPM assistance to the planning effort has helped to institutionalize NRM and planning and link it more directly to development planning. Thus, NRMSA contributes to attainment of the EPM project purpose.

4. Recommendations

(a) The NRMSA theme area could, with some broadening, be made the framework of a follow-on EPM II project. Support to NGOs, assistance in natural resources data management and assistance in landuse management (sustainable agriculture, biodiversity conservation and tropical forestry land use folded

together) would be supported with the objective of their contributing directly or indirectly to regional, national, or subnational NRM planning efforts. The point would be to link EPM support to the likelihood of sustainable NRM actions.

(b) NRM planning is increasingly recognized as a powerful tool in supporting sustainable development. (For example, the World Bank is currently supporting the development of National Environmental Action Plans (NEAPs) in seven countries in Africa and expects to support efforts in 18 countries in the future.) A future EPM should seek to play an active role in influencing the anticipated growth in national (as well as regional and subnational) environmental plans to adopt the participatory, national institutional building, and bottom-up/top-down NRM linkages that are the current hallmarks of EPM. One way to achieve this role of influence would be for EPM to develop and package a methodology -- a state-of-the-NRMSA-art -- for the variety of types of natural resource assessments, strategies, and action plans that are within EPM's active experience.

(c) EPM's experience with the large-scale, multi-donor NRM planning efforts suggests need for monitoring the NEAP process and evaluating their progress, individually and as a recurring global phenomenon. A NEAP monitoring and evaluation function could be pursued by EPM through strong collaborative relationships with developing country partners. A critical function would be analyzing the policy constraints to participatory approaches to Environmental Action Plans and helping develop appropriate policy reform agendas.

(e) Study and design of NRMSA type activities for a future EPM should also take into account other areas of concern that have been recognized through the experience of EPM and observed during the course of this evaluation. While stated here with reference to NRMSA, it should be noted that these issues include and overlap with issues generated by study of the other EPM program theme areas. Future EPM design issues should include the following:

1. Supporting country-level capacities in natural resources data management in general and environmental impact assessments in particular as a part of the NRMSA process. Linking data management and analysis capacity with natural resources management and planning at a variety of levels within countries - from national to local.
2. Disseminating the Center's experience and expertise to a wider, external (non-client) audience, focussing on the Center's approaches and methodologies. Writing a state of the art report on NRMSA as a means of reaching a wider audience may be especially timely now, when

donor commitments to the environmental sector are increasing.

3. Exploring mechanisms for an increased role in follow-on activities to NRMSA efforts, primarily to increase the capacity of the Center to assess and improve its program impact. For example, the Center could explore the possibility of working in selected, focal countries over the long-term to provide opportunity for repeated follow-on actions.
4. Testing whether policies have their intended effects at the local level. Testing project assumptions, namely, that policies strongly influence natural resource management at the local level.
5. Illuminating and supporting gender-specific considerations in NRMSA at all levels.
6. Developing a new analytical tool to help countries improve their pricing of natural resources. This is an area where the Center and WRI could mutually benefit and could be pursued by the natural resource economist recently hired on a shared arrangement between the Center and WRI.
7. Strengthening the role of media in providing an informal forum for dialogue between the government and the public on NRM issues.
8. Supporting public access to environmental information and decision-making processes, for example, environmental impact assessment of development projects.
9. Monitoring and evaluating regional and national level planning efforts. It is likely that these efforts will increase in the future in a variety of forms, for example: World Bank Environmental Action Plans, UNCED National Reports, Global Climate Change assessments, country strategies under the Global Biodiversity Strategy, and urban analyses. The Center could play a monitoring role similar to its role in monitoring the TFAP program.
10. Providing technical expertise to A.I.D. from the Center and WRI, and access to expertise from other NGOs, the university community, the private sector, etc., if A.I.D. decreases its technical staff as threatened.

B. NGO Support

1. Introduction

In terms of total project activities under EPM, NGO support activities (52) rank second behind NRMSA (122). As indicated above in Figure 3, NGO activities funded by EPM have been evenly balanced between Africa (22 activities in 6 countries) and Latin America/Caribbean (22 activities in 9 countries), with smaller levels in Asia/Near East (10 activities in 6 countries) and global/U.S. (11 activities).

The Evaluation TOR (Appendix 5, p.7) asks (a) whether EPM has advanced the role of indigenous NGOs in NRM, (b) what is the goal for NGO support through EPM, and (c) what has EPM taught about future potential of NGOs in NRM.

2. Findings

(a) Advancing the role of NGOs in NRM

EPM's NGO program since 1985 has been directed to meeting specific institutional needs of NGOs and grassroots organizations so they might be more effective in NRM. The identification of NGO needs was accomplished by Center staff over a period of several years and was drawn initially from staff experience in Asia and, since 1988, from Center experience in Latin America and Africa. The NGO needs addressed by EPM include:

1. Deficiencies in skills and systems required to integrate environmental and NRM factors into their development activities.
2. Limited capacity and resources of NGOs to communicate accomplishments in ways to influence policy beyond their immediate areas of interest; and
3. Generally, the weak administrative and management capacity of NGOs (including, often, limited capacity to achieve financial viability and sustainability).

To address these needs, EPM's NGO program has provided a range of resources and support to NGOs. A listing of EPM NGO theme activities undertaken over the past five years is outlined in Appendix 3 and detailed in the supplementary Appendix volume. The separation of support and policy activities may serve some administrative convenience, although conceptually -- and in EPM practice -- they are clearly linked and mutually reinforcing. EPM aims at supporting NGO participation in NRM policy making as well as NGO participation in actions to implement NRM policies.

(i) NGO support services under EPM have included the following activities:

1. development and dissemination of handbooks, guides, and analytical tools on participatory community self-diagnosis, appraisal, and planning for NRM (for example, support for PRA handbook and appraisal documents);
2. training through workshops and financial support (for technical assistance) for testing and application of participatory NRM appraisal and planning approaches (e.g., workshops in Kenya, Ecuador, Guatemala, Washington, DC);
3. financial support and technical assistance for case studies, disseminated through publications, workshops and other fora, concerning such matters as local level and indigenous populations' resource management (see discussion below on From the Ground Up policy studies);
4. identification of opportunities, and supporting technical and financial assistance, for NGO direct participation (including presentation of study products) in national level policy and planning efforts for NRM (e.g., in Rwanda, Ghana, Thailand, Bolivia, Guatemala);
5. technical assistance to develop and implement strategic approaches to longer term NGO management capability and financial viability (e.g., in Guatemala)
6. small grant funding (combining EPM resources with U.S. private foundation funding) for institutional development, outreach, strategic planning, documentation, networking via umbrella organizations and collaborative training efforts (Asia, Latin America/Caribbean, Africa).

(ii) NGO policy impact program activities (particularly the From The Ground Up program) have included the following:

1. Beginning in 1987, with EPM funding and U.S. private foundation support, the Center began an ambitious village level NRM research program in Africa called From the Ground Up (FGU). A detailed review of this policy impact program is found as an evaluation case study in the supplementary volume for Appendix 3. The aim of the program is to identify, analyze, and document community or village level experiences in NRM, then share that information with natural resource policy makers as well as with NGOs and other

organizations working at the community level.

2. The FGU program surveyed NRM practices in 18 sub-Saharan African countries, then commissioned and provided support (financial and technical) for a total of 16 detailed case studies in 9 of the countries surveyed. The studies were undertaken by national NGOs. Thirteen of these studies have been completed, and two have been printed and are now in distribution with the balance projected for distribution in 1991.
3. In 1990 and 1991 the Center has expanded the FGU research and policy impact program to three countries in Latin America.
4. Based on the initial experience and with an increasing number of case study materials now on hand, the Center is increasing its effort to showcase the FGU studies at conferences, seminars, and other fora to gain the attention of policy makers on the value of grassroots participation in NRM policy formulation. In a new program beginning in 1991, funded jointly by EPM and the Canadian International Development Agency (CIDA), the Center will undertake case studies specifically illustrating approaches and actions by NGOs in the NRM policy process.

(b) Goal of NGO support in EPM

The 1989 EPM Project Paper Supplement spelled out (pp. 31-32) NGO theme area objectives as being to:

- "encourage new partnerships between environment and development NGOs in developing countries by promoting new working relationships, better problem definition and corresponding solutions regarding how the rural poor can benefit from community-based natural resource management"
- "strengthen the capacity of selected indigenous non-governmental organizations to influence natural resource management and economic development projects and programs, particularly as they are expressed at local levels"
- "provide technical and financial resources to strengthen the organizational management, capabilities, technical capacity, and communications and networking processes of NGOs."

EPM project design documents and EPM work plans show that EPM over its course has viewed NGOs as institutions that bridge NRM

interests at local levels with macro-policy level NRM concerns. As with all EPM-funded activities, NGO activities under EPM are intended to strengthen developing country institutions and policies for effective natural resources management. (See Appendix 2 concerning evolution of NGO theme objectives over the course of EPM.)

The Center often combines EPM support of NGOs with funding support from other public sector and private sector sources. EPM's NGO-specific activities are substantively, and often operationally, related to other EPM theme areas, particularly NRMSA and sustainable agriculture.

The focus of NGO program has been on strengthening NGOs in their role as facilitators of participation. The Center's collaboration with NGOs gives priority to the development and/or use of tools and techniques, like PRA, and to assistance in seeking "political space" in which NGOs can operate effectively.

(c) NGO issues for NRM

(i) There are some significantly different types, levels, and roles of NGOs in NRM work, including within the EPM NGO program clientele. For example, a distinction must be made between the needs and roles of NGOs that are representative of or derived from a community base, and those urban based NGOs (national or international) that seek to serve or assist communities. The Center's performance under EPM reflects good knowledge of the different types and needs of NGOs. In the Latin America/Caribbean region, for example, EPM has dealt with both these categories. In Africa, on the other hand, the NGOs with which EPM has worked are usually associated with the rural or poorer communities.

(ii) The linkage between NGO policy work (FGU) and formal NRMSA processes stems from different starting points. In the case of Rwanda, for example, the Center was first engaged with the NGO community as a part of the formal EAP process. It was only after this connection was made that the Center expanded its role with the NGOs to include FGU case studies, which proceeds now rather independently of the NEAP process. The order was reversed in Ghana, where the Center first connected with NGOs as a part of FGU research and thereafter helped incorporate the NGOs into the formal EAP process.

(iii) The level of client satisfaction with EPM is very high. This includes EPM's assistance in technical capacity strengthening (e.g., participatory methodologies) and increased visibility for NGOs in policy fora. The client satisfaction is also based upon very positive personal relations, coupled with respect, developed between NGO personnel and Center personnel. (The value of the personal touch extends beyond the Center's

travelling staff most commonly working with NGOs (e.g., Aaron Zazueta, Peter Veit, Lori-Ann Thrupp, Kirk Talbott, Bruce Cabarle); in two specific instances in Africa there were unprompted compliments for the long-distance communications style of Kara Page, NGO Program Assistant.) However, even though the Center prefers not to be viewed by NGOs as a source of financial support, inevitably some of the client satisfaction is also based upon the fact that the Center is a source of financing, including in some instances a link between NGOs and financial sources other than EPM. Thus, there may be some distance between the Center's view of itself and how the Center is viewed by those with whom it deals. The evaluation team found no evidence that this difference adversely affected Center performance in dealing with NGOs. But it is something to which the Center should remain sensitive.

(iv) The Center, with the help of WRI, does have clearly defined and well executed programs for dissemination of documents generated by the FGU program. However, the evaluation team did encounter (in Africa) a surprising uncertainty by some of the Center's FGU partners as to the strategic plan underlying the publication dissemination programs. This raised the possibility of failed communication between the Center and the NGOs and, possibly, insufficient use of the NGOs themselves to determine publication strategy (e.g., on use of publications to influence policies in the countries where the research was done).

(v) The evaluation team's examination of NEAPs under NRMSA illuminated that these planning processes are still, in major respects, donor-driven, and heavily oriented to development investment decisions. On the one hand, work with the World Bank and other donors in conjunction with NEAPs gives the Center and NGO colleagues entry to national policy arenas otherwise foreclosed to the Center (and its constituents, including the NGOs). On the other hand, the Center runs the risk of validating donor-driven strategies (which might or might not serve to improve grassroots NRM). There is also the risk that the Center in the course of this could unwittingly be a party to top-down co-opting of community and NGO interests. The evaluation team encountered some expression of this concern by NGOs during the field visits.

(vi) There is evidence from EPM partner NGOs that NGOs can be an important source of influence on NRM policy not just directly (with policy makers, through NRMSA, etc.) but also indirectly through public awareness, media, environmental training (professional), and education (primary, secondary). The evaluation team saw evidence of the value of such approaches in Chile, Bolivia, Nepal, Thailand, and Kenya. In Kenya, for example, where national political issues may make a formal NEAP involvement untimely, a public awareness approach might be particularly appropriate.

3. Conclusions

(a) EPM supports and engages NGOs directly in NRMSA processes. This makes a positive contribution to NRMSA efforts and has a capacity building effect on the NGOs, thus contributing to the EPM purpose of institutional strengthening for NRM in developing countries.

(b) Overall, the Center's capacity for supporting NGO involvement in NRM is one of the significant distinguishing features and contributions of EPM. EPM's work with and through NGOs proceeds at several levels of function and purpose:

1. The most important aim of EPM's NGO support work is to enable and engage NGOs for direct participation in NRM decision making and implementation processes. The degree of importance of NGO involvement in these processes is commensurate with the NGOs' status as representing the interests or aspirations of the grassroots NRM stakeholders;
2. In some countries (and particularly in Latin America where there are national level NGOs with power and roles comparable to those of government agencies), EPM's involvement with NGOs has been both for the purpose of enabling community involvement in NRM and in gaining access to top level NRM decision makers;
3. Through the Center's FGU program (supported in part by EPM in association with private funding secured by the Center), EPM has become effectively engaged in studying and illuminating the creative process of local level NRM decision-making, planning, and implementation that can operate independently of national level NRM processes. By supporting local NGOs in the case study analytical processes and showcasing the NGOs, and by sharing their experience and knowledge with others, EPM contributes to local level NRM.

(c) The Center's tradition, approach, and capacity for working with NGOs are well recognized and provide the Center, and EPM, with credibility both with the NGOs as well as with governments and donors. For example, the Center's facility for working with NGOs has been a principal reason for the World Bank's expanding collaboration with EPM and the Center in EAP activities in Africa.

4. Recommendations

(a) Given the conclusion concerning the positive role of the NGO program to attainment of EPM purposes, the evaluation team clearly recommends that NGO support and policy work remain

an integral part of any future EPM efforts, particularly as a means of promoting the participatory aims of EPM.

(b) NGO-related research and documentation should be given top priority in an EPM strategy for NRM publications.

(c) Either as part of EPM during its current term or in preparing its proposal for a successor EPM project, the Center should analyze and document its findings on the following issues:

1. Does integration of NGOs into NEAPs and other formal NRMSA processes threaten to co-opt NGOs to a NRM approach that is more donor-driven than an NRM which is based on grassroots needs and realities?
2. What is the potential of NGOs for promoting public education and mass media approaches to influence NRM policy? Should EPM support such approaches?
3. Should EPM -- through the Center, or through collaborating organizations such as IIED/London or IUCN -- conduct a state-of-the-art study to update PRA methodologies in light of experience in many different countries? For example, should there be some control studies of a duration and depth not usually associated with PRA to validate the methodology? In this connection, EPM might also address the matter of possible expansion of PRA and FGU analytical and study approaches to new stakeholders (e.g., women and children) and new NRM issues (e.g., urban and pollution issues).

C. Natural resources data management

1. Introduction

Through the period of the 1988 EPM Work Plan, Natural Resources Data Management (NRDM) activities under EPM were usually identified under the heading of Integrated Planning Technology (IPT) program as well as implied as part of other EPM theme activities (particularly NRMSA). The 1989 Project Paper supplement refined and expanded the IPT theme as Natural Resources Data and Planning Technologies, with the following seven elements or areas of activities:

1. data base management and country environmental profiles
2. directory of country environmental studies (CES)
3. natural resources indicators for tracking NRM progress
4. natural resource indicators and country trends monitoring network
5. IPT training workshops
6. development of Forum for Natural Resource Information

- Management (FORIM)
7. relating World Resources Report to A.I.D. interests.

In the 1990 EPM Work Plan, this theme area was redesignated as NRDM, with the following purposes:

1. to assist policy makers in developing countries, and those who work with them, to compile, access, and use better information on natural resources,
2. to strengthen capacity in developing countries and other organizations to improve the management of environmental and natural resources data (from 1991 briefing materials from the Center).

(See Appendix 2 concerning evolution of NRDM objectives over the course of EPM. See, also, Appendix 3 and the supplemental Appendix volume for detailed description of the NRDM activities under EPM.)

The evaluation TOR raises a series of questions (Appendix 5, p. 7) concerning the NRM data and NRM data management contributions of the NRDM program theme of EPM. Evaluation team responses are covered in the findings and conclusions below.

2. Findings

(a) The current focus of NRDM activities is on:

1. developing information policies and strategies for international agencies, for example, development of a design study for A.I.D. for establishment of an environmental and natural resources information center (ENRIC); collaboration with the World Bank, U.S. Environmental Protection Agency, and A.I.D. on design and use of databases on natural resources and natural resources activities; development of guidelines for national reports for the U.N. Conference on Environment and Development (UNCED); plans for the International Forum on Environmental Information for the 21st Century; establishment of a natural resources information management experts group for the Africa Bureau; plans for the A.I.D. country trends monitoring network;
2. developing statistical indicators of trends in natural resources and analysis of natural resources data, for example, development of natural resources indicators for A.I.D. regional bureaus; development of indicators for urban environmental quality, biodiversity, and coastal resources; development of an overall framework for performance indicators for the Africa Bureau;

3. increasing the availability of natural resources information, for example, production of the 1990 Directory of Country Environmental Studies and its supporting, publicly available database; conceptual and limited financial support to the supporting database of the World Resources Report (WRR); plans for the Guide to Global Environmental Statistics; establishment of the International Environmental and Natural Resource Assessment Information Service (INTERAISE) in collaboration with IIED/London and IUCN.

These relatively new NRDM activities have worked primarily to influence information policies and practices of international organizations concerned with national-level natural resources trends. These activities are marked by a high degree of collaboration with development agencies and others, including the World Bank, the U.S. Environmental Protection Agency, UN Statistical Office, IUCN, IIED/London, the World Conservation Monitoring Centre, FAO, UNEP and UNDP. The Center has also collaborated with some developing country institutions, for example, EPM has helped plan and support the work of the Sahelian Information Service located in Mali and provided advice on information systems and software for statistical graphics for the state of the environment report project in Sri Lanka.

The NRDM program reflects the highest level of Center-WRI integration among the four EPM theme areas. The theme director, Dan Tunstall, has a split appointment with the Center and WRI's Program in Resource and Environmental Information and is, by definition, a source of this integration. The Center has access to WRI's expertise and WRR database, while WRI has access to the Center's country-level experience.

(b) Progress towards identifying NRDM needs

The Center has identified major NRDM needs through its work towards compiling and making available country-level natural resources data (in data or report form). The Center has shared its view on NRDM needs in a variety of fora, thereby potentially influencing data management programs and funding priorities of other institutions. One aspect of this expertise on NRDM needs will appear in an upcoming paper entitled "Eyeless in Gaia: The state of global environmental monitoring", whose publication is expected in late 1991. Another major event was the International Forum on Environmental Information for the 21st Century, held in Montreal in spring 1991. WRI co-sponsored this conference, and the Center assisted in its design, worked on background theme papers, identified developing country participants, and drafted the final Information Statement. The Center is working to make NRDM an issue on the UNCED agenda, and the UNCED secretariat has agreed to present the Forum Statement and plans for an environmental information strategy at the next UNCED preparatory

committee meeting. Through this effort the Center hopes to influence UNCED in developing its information priorities.

In addition, the Center assisted UNCED in drafting its guidance for national reports. The information base from the UNCED national reports could have real value in defining future information needs and approaches, e.g. for reporting on progress towards sustainable development.

The Center is currently working with the World Bank on ways to incorporate the WRR database into the World Bank's extensive economic and development databases. These discussions have raised the level of understanding of both the World Bank and WRI of mutual data needs.

The Center was instrumental in researching A.I.D.'s natural resources data and information needs in its development of a design study for an environmental and natural resources information Center (ENRIC) for A.I.D. This effort built on earlier EPM activities in developing and maintaining a database on A.I.D.'s biodiversity activities, and in analyzing data and preparing reports to Congress on biodiversity and tropical forestry activities based in part on this database. Full agreement between A.I.D. and the Center was not reached on how this proposed center should be structured and operated. However, its work was considered valuable by A.I.D.

The Center has also contributed to the conceptual development of country and regional environmental information centers in developing countries. The need for such centers has become apparent through NRMSA efforts, the need to develop NRM indicators, and from a general recognition of the need for institutional development in this area in developing countries. For example, the Center developed a proposal for a Central American environmental information center for the Regional Natural Resources Management (RENARM) project for A.I.D.'s Regional Office for Central America and Panama (ROCAP). However, the proposal was not implemented, because the Center could not provide funds to match those from the RENARM project. During evaluation country visits a strong demand for assistance in country level environmental information systems was articulated by government and NGO officials. The Center's views on country information centers have not yet been fully developed; however, a paper on the need for environmental information centers will be completed by fall 1991. A.I.D. and the Center should consider assistance in this area under a follow-on project. Since this is a new area for EPM, pilot project activities might serve as a means of developing an approach before a larger-scale commitment is made.

(c) Increased availability of data

Increasing the availability of natural resources data has been a major focus of the NRDM theme. Early effort in the establishment of the Forum on Natural Resource Information Management (see below) led to a broader recognition of the need to increase the availability of environmental information. The most significant output towards this objective has been the publication of the 1990 Directory of Country Environmental Studies and its electronic diskette version and establishment of three libraries of actual documents (at IIED/London, IUCN in Gland, Switzerland, and WRI and the A.I.D. Development Information Service in Washington). The directory has been well received and is in demand by development agencies and policy analysts in developing countries. The Center plans to update and expand the directory and is looking for ways to make the information more readily available through other media, e.g. optical disk technology. However, the Center intends that in the future more of this work will be absorbed by regional and national centers, because the database of studies will continue to expand and become considerably more substantial as subnational and sectoral studies increase.

The Center has increased the availability of data on A.I.D.'s environmental programs within A.I.D. itself and to a wider audience of other development agencies and organizations that actually implement much of A.I.D.'s environmental work. For example, the Center prepared a briefing book on A.I.D.'s environment and natural resources program in 1987 that served as an overview of this rapidly expanding area of concern for several years. In February, 1991, the Center assisted in the design of an environmental "retreat" for senior-level A.I.D. staff. A.I.D. regional bureau representatives reported that the day-long retreat was conducted well and further sensitized top A.I.D. personnel to natural resource issues. Preparation of reports to Congress on A.I.D.'s activities to conserve tropical forests and biodiversity also served the important function of garnering increased support from Congress and others for A.I.D.'s efforts in this area.

The NRDM program has also been instrumental in planning and establishing the INTERAISE project, a joint project of the Center, IIED/London, and IUCN, in cooperation with A.I.D. and German, Swiss and Dutch aid agencies. The purpose is to develop small information centers and libraries of country environmental studies in Washington, Gland, and Canberra, and to make this information available to donors, researchers, and developing country experts. Plans for the second and third years of this project (1992-93) call for wider distribution of documents to NGOs and developing country governments and establishment of comparable country environmental study directories in national and regional centers.

(d) Development of indicators

Limited but increasing progress is being made towards development of indicators of natural resources trends. The full potential of the NRDM theme may be realized when new initiatives for bottom-to-top data integration take place. WRI's thrust at a global level (primarily via the WRR) could be complemented by EPM's country and local level focus, especially if the Center works towards developing country-level capacities in NRDM to support NRMSA efforts in the future. The African indicators work provides the best trial opportunity. Its most concrete product at the farm level is the "Whole Earth Indicators Catalog," although it is too early to assess its value.

Sustainable development indicators have not been developed under the project. This will become a subject area of increasing significance, because sustainable development objectives will be long-term and will require clear means for monitoring progress.

(e) Integrated Planning Technology

The Integrated Planning Technology (IPT) model was developed as a tool for adaptive environmental planning and management. The first objective was to assist A.I.D. in setting an integrated, objective, research agenda in natural resources management. The 1984 evaluation concluded that this objective was unlikely to be achieved, and the purpose was changed. Its new purpose, similar to that of other Center tools, was to get at neglected, forgotten or ignored stakeholders and issues that may be critical to development of sound NRM plans. Under this purpose, the use of the model in development of NRM plans was intended to be an empowering, heuristic device for participants in the process. It was to provide a visual and high impact means of exploring alternative management strategies, understanding gaps in our information base, and grasping the dynamic nature of ecosystems. Its means of development was a case study approach, drawing on informed opinions of scientists and decision-makers using workshops and computer simulations to design policy strategies.

The IPT model has been tested or used in several countries, including India, Thailand, the Philippines, Sri Lanka, Botswana and Ghana. In Ghana the Fisheries Department has modified its research program as a result of the IPT workshop and model. The coastal model was validated and tested; however, the forestry model was never validated. Unfortunately, under its development, the IPT model moved away from a focus on being a heuristic tool and towards a focus on being a "product" with predictive value. In the end, inordinate effort was invested in developing and validating a relatively detailed rangeland-wildlife-livestock model that was complex and highly (and successfully) predictive. To its credit, this rangeland model is being used by the Government of Zimbabwe in a national planning effort.

The lack of use and/or validation makes assessment of the model's value and impact rather difficult. In addition, lack of enthusiasm by USAID mission staff and A.I.D. has meant that its potential for assisting A.I.D. in NRM has not been tested. Even though the IPT model was used in several workshops, there is little evidence (except in Zimbabwe and Ghana) of a lasting field value as compared with the widespread adoption of PRA, which shares some of the same characteristics - but without the computers.

Movement away from the original purpose of the model was driven by several of the personalities involved in its development and direction and perhaps reveals the Center's potential vulnerability to A.I.D.-driven interests that are at cross-purposes to EPM objectives, a clear pitfall in any cooperative agreement. In the end, IPT has not been widely used and has been closed out within the project. The rangeland-wildlife-livestock model and its validation have been presented in a final report, "Planning in the Dark: Illuminating Natural Resources Management Development with a New Systems Process," and is currently being published by a commercial publisher. Taken as a whole, the model may be too muscle-bound to be an effective tool for the Center's typical clients, as was originally conceived, but it appears to contain many replicable elements. Given the sunk costs and limited adoption, but potential value, the decision to close out this effort within the EPM project was a good one, as was the decision to make it available to a broader audience through publication of "Planning in the Dark."

(f) Forum on Natural Resource Information Management

The Forum on Natural Resource Information Management (FORIM) was an initiative started in 1987-88 with support from A.I.D., the World Bank, and IUCN's World Conservation Monitoring Centre to encourage the development, exchange and use of natural resource and environmental information for sustainable development. Three workshops on geographic information systems (GIS), expert rosters, and project databases were held. However, the anticipated financial support, sustained interest of the individuals who had proposed the initiative, and agreements over data-sharing did not materialize, and the effort was eventually dropped. However, the brief life of FORIM did increase awareness of the need for improved capacity in natural resources data management, and enthusiasm was raised. Individual elements of the proposed project have survived under different programs, for example, the 1990 Directory and conceptual development of ENRIC.

3. Conclusions

(a) NRDM has increased the availability, analysis and use of natural resources data to and by multilateral and bilateral

development agencies, and to a limited extent, international NGOs (IUCN, IIED/London). NRDM has made less of a contribution towards developing the capacity of public and private institutions in developing countries to compile, gain access to, analyze and use better information on natural resources in their own countries. The direct client in most NRDM activities has been A.I.D. or the Center/WRI itself and the users have been A.I.D. and other development agencies.

(b) The evaluation team has found that the work supported through NRDM to date has been valuable, met a clear need, raised awareness of the need for natural resources data, and generated increased support in the development community for improving natural resources data systems. The evaluation team is concerned that the NRDM emphasis in serving development agencies and improving their work only indirectly supports the stated purpose of the theme area, and of EPM generally, to strengthen the capacity of developing countries, their policy-makers and those who work with them, to compile, access and use better natural resources information to improve NRM. However, the evaluation team recognizes that improving the work of development agencies is an important parallel activity (to NRDM capacity building in developing countries) with high leveraging potential. And the evaluation team also notes that developing country institutional strengthening was not made a specific objective of the NRDM theme area until the 1990 EPM work plan.

(c) NRDM is beginning to develop natural resources indicators for monitoring environmental trends and for assisting A.I.D. in measuring program and project performance. This is another example of a conceptually valuable activity, but whose clients and/or beneficiaries at this stage are development agencies rather than developing country capacity in NRM and planning.

(d) The opportunity to use NRDM as a means to strengthen national capabilities for producing high quality strategies and action plans under NRMSA, in particular, and to support country-level efforts to develop NRDM programs, in general, is beginning to be recognized by the Center. The evaluation team found clear demand and interest in all regions for development of national and local level NRM data systems and environmental impact assessment capacities, and WRI was recognized by countries visited as having preeminent expertise. Tighter links between NRDM and NRMSA would strengthen NRMSA efforts and are planned by the Center.

(e) The indicators work in Africa, although still in a very early stage of development, is potentially an effective means for linking bottom-to-top (local to national) NRM information. This is a highly relevant use of EPM resources, and an approach well reflecting the Center's orientation to the grassroots. The

evaluation team encountered substantial interest during the country visits -- from national public and private institutions as well as field missions -- for a more activist role by EPM in developing practical NRM and ENR indicators.

(g) Despite considerable investment, the Center did not succeed in developing and implementing the IPT model as a heuristic, enfranchising tool for adaptive environmental planning and management. The Center was successful in building a complex, well-validated model for management of rangelands, wildlife and livestock. This effort has been captured in the pending publication of "Planning in the Dark." The skewed direction of the IPT effort provides a lesson on the dangers of personalization of project activities and the vulnerability of a cooperative agreement to A.I.D.-driven interests that are at cross-purposes to EPM objectives.

4. Recommendations

(a) Based on the demand for assistance in natural resources data management and environmental impact assessment, the evaluation team recommends that the NRDM theme be continued and expanded in a follow-on project. The Center and A.I.D. should more actively relate NRDM to the overall EPM purpose of supporting developing country capacity to compile, gain access to, analyze and use natural resources data in development planning. Future NRDM activities could strongly support NRMSA efforts.

(b) The Center and A.I.D. should consider support for the following under design of a follow-on project:

1. updating and improving the Directory of Country Environmental Studies and expanding this work at the regional and national levels;
2. undertaking pilot projects to strengthen existing or promote establishment of country and/or regional environmental information centers; working with statistical offices and with those preparing environmental impact assessments and environmental strategies and action plans to improve the collection, analysis and dissemination of environmental information in the sustainable development context;
3. linking local, national and international data sources to improve policy-oriented environmental information;
4. establishing ENRIC and promoting its linkage to building developing country capacity in NRDM;
5. support for expanded use and experimentation with new

information management systems and technologies, especially GIS, database management systems, and satellite imagery. These technologies should be used to the extent that they support NRDM needs at the local and national levels;

6. continued development of natural resources indicators at multiple levels to the extent that it improves developing country NRM and planning and A.I.D.'s program development and evaluation. This work should be expanded to include indicators for monitoring urban environmental trends, industrial pollutants, loss of biodiversity and for critical trends in other environmental subsectors.

(c) Future support to NRDM activities should include developing practical tools for natural resource managers and policy makers. The follow-on project should seek to close the gap between state-of-the-art information and data systems and their genuine utility for NRM at the national and subnational levels. IPT's unwitting role in illustrating this gap should be part of its epithet.

(d) The lack of requests to EPM from USAID missions or developing country institutions for in-country NRDM activities is inconsistent with consistent expressions to the evaluation team during the field visits of interest in NRDM support. The extent or nature of this discrepancy should be explored. It may indicate, for example, that the capabilities of EPM have been inadequately explained to the USAIDs.

(e) Many of the NRDM activities are supported through S&T/FENR Project Development and Support (PD&S) funds that are moved through the EPM project to the Center but which have not been treated as subject to the program objectives of the EPM cooperative agreement. In FY 1991 PD&S funds exceed EPM core funds to the project, yet there is no articulated, strategic relationship of these PD&S-supported activities to EPM's goal and purpose. While these activities indeed are valuable to A.I.D., whether they should be supported through EPM should be examined closely under the design of EPM II.

D. Sustainable agriculture

1. Introduction

For historical as well as contemporary reasons, EPM involvement with sustainable agriculture warrants special consideration. Sustainable agriculture was a central element in the work of IIED/NA under EPM: EPM's recognized place in sustainable agriculture was due to its capacity for research and training on participatory NRM rather than technical capacity in such fields

as biological research. The agro-ecosystems perspective of EPM's work in sustainable agriculture was, in fact, the basis for the participatory approaches to NRM now embedded in NRMSA and the NGO themes. EPM's capacity to fill an important niche in sustainable agriculture was a temporary casualty of the WRI-Center merger because of the distancing of IIED/London (and sustainable agriculture) from its central role in the EPM (and Center) agenda.

In 1990, the Center took the initiative to reestablish itself in sustainable agriculture, has staffed itself well to do so, and is currently examining how best to involve itself in sustainable agricultural development.

The 1985 EPM revised Cooperative Agreement established the basis for EPM supporting and developing "techniques to address the question of sustainability." By the time of the 1988 EPM Work Plan, sustainable agriculture was recognized as one of the four EPM theme areas, defined as supporting

"agricultural development projects that can be sustained in socio-economic and ecological terms over the long-run."

This work plan was completed in September 1987, prior to the IIED/NA-WRI merger. It had been premised on a continuing role of IIED (including IIED/London) in sustainable agriculture under EPM. By the time of the 1989 Project Paper Supplement, the merger had been completed and there was increasing disengagement of IIED/London from direct EPM work. The 1989 Project Paper Supplement described the need and value of continued EPM support of sustainable agriculture activities. However, no details were provided on what was described in the Supplement as a program still in the stage of being developed.

2. Findings

EPM was active in the mid-1980's in gaining knowledge, reporting and training in community based approaches to sustainable agriculture. Much of the research and publications was under the headings of agroecosystems analysis, Rapid Rural Appraisal (RRA) and, more recently, Participatory Rural Appraisal (PRA). The EPM supported research and training were spearheaded by IIED/London under Gordon Conway and Jennifer McCracken, whose work in participatory approaches to sustainable development is widely used throughout the world. EPM support has included the "Gatekeeper" studies on sustainability issues in agricultural development, RRA training (Thailand, Indonesia) and short courses (Sudan, Chile, U.S.), and RRA "Notes", informal papers to share RRA experience and methods with practitioners.

Since 1987, however, many of the participatory methods involved in EPM's sustainable agriculture program have been further

developed and applied under other EPM theme areas, particularly the NGO support program and NRMSA. Over the period 1985 - 1990, EPM accounting records show only 19 SA activities in four separate countries in sustainable agriculture, least of all of the EPM theme areas. (Figures 1 and 2. See, also, Appendix 3 and the supplemental Appendix volume for description of prior SA activities supported by EPM.)

In 1990 the Center reviewed its involvement in sustainable agriculture and hired Dr. Lori-Ann Thrupp to develop a program for the Center, which is now being reviewed. The proposed program will focus initially in Latin America, and be aimed at linking bottom-up, local level perceptions and needs with national level perceptions and policies. A central emphasis would be on understanding and integrating multiple levels of interest and applying of insights gained from the analysis to achieving practical changes. Among the themes to be included in the program are the following:

1. land-use policies and tenure systems
2. factors affecting women in agriculture
3. technology and agrochemical policies and programs
4. credit and subsidy programs and policies
5. policies affecting use of trees in farming
6. agroexport versus local food-crop production

The proposed program is to identify principles and processes adaptable to different situations, deriving both conceptual insights and practical, operational approaches. The information is to be shared through publications, training programs and workshops, use of information networks, and possibly environmental education and awareness-raising methods.

3. Conclusions

(a) Concepts of sustainable agriculture or agro-ecology are too important to be ignored or buried. EPM can identify and fill gaps in the linkages between agriculture and the environment and can also link sustainable agriculture concerns into the NRMSA process.

(b) EPM's experience under the sustainable agriculture theme area illustrates both the evolutionary nature of EPM itself as well as change in the broader development context within which EPM functions. Through much of the 1980's, EPM under the sustainable agriculture theme broke new ground in approaches and tools for local level NRM. With the separation of IIED/NA from IIED/London, EPM's and the Center's capabilities in sustainable agriculture have been less recognizable. EPM has continued support of work more often identified with other organizations, such as IIED/London or Clark University, or with theme areas of EPM other than sustainable agriculture.

(c) The Center's renewed interest in sustainable agriculture is addressed to NRM factors common to other EPM activities such as grassroots stakeholder participation, equity (including gender considerations for NRM not previously focused on by the Center), gap filling in the NRM processes, bottom-top linkages, development of practical analytical tools, and close integration with other EPM theme areas (particularly NGO support, tropical forestry and land use, and biodiversity conservation). The proposed sustainable agriculture program would appear to be a good fit within EPM and would bring focus and elements not currently addressed within the other theme areas.

4. Recommendations

(a) In examining the future role for activities in sustainable agriculture within the Center and EPM, the evaluation team recommends folding sustainable agriculture, biodiversity conservation and tropical forestry into a single theme or program area. The overall scope would be sustainable land use with a focus on methodologies to meet human needs sustainably, through improved natural resources management and planning. Such a melding of themes would give recognition to the common elements of each of these three areas under current Center use. Activities under the three theme areas:

1. support development and implementation of policies that address root causes of natural resource degradation and promote improved NRM.
2. give voice to under-represented stakeholders by supporting NGO participation as a means to incorporate needs and perspectives from the grassroots.
3. promote cross-sectoral integration. They represent possibly common approaches to linkage of science-based technologies with grassroots needs and capacities, including local-level institutional strengthening.
4. reflect a common concern for meeting human and environmental needs. Equity and poverty considerations are high within each of the three areas.
5. become exercises in institutional capacity building for NRM, including at the grassroots level.

(b) Continued EPM support for sustainable agriculture should be considered as complementary to A.I.D.'s varied projects in the area, including the proposed new collaborative research support program known as Sustainable Agriculture and Natural Resource Management which is currently in the competitive bidding process.

IV. Program Matters Outside the Theme Areas

A. Biodiversity conservation program

1. Introduction

EPM's biodiversity activities provided critical support to A.I.D.'s entry into the field. Since that time, the Agency has developed several programs specifically focussed on direct support for biodiversity conservation through S&T, the regional bureaus and USAID missions. With these programs, technical expertise and some financial resources are available through A.I.D. to developing country governments and NGOs to support biodiversity conservation. Nonetheless, EPM biodiversity activities continue to play a distinctive role in A.I.D.'s program and is characterized by several themes in common with other EPM program themes.

As outlined in Figure 3, EPM has funded some 30 biodiversity activities by the Center. (See Appendix 3 for listing of these activities, and the supplementary Appendix volume for more detailed description.)

2. Findings

The primary focus of the EPM biodiversity theme area has been on conducting critical analyses of biodiversity conservation efforts, including analysis of international, U.S., A.I.D., and developing country programs. For example, EPM has supported analysis of U.S. Government biodiversity activities, A.I.D. biodiversity activities, level and focus of funding by U.S. institutions, methods to determine conservation priorities, and recommended actions for development agency support. It has also supported technical evaluation and assessment of biodiversity conservation in five countries and one region and of the status of sustainable tropical forest management.

Most of these analyses have been used in policy and program development by A.I.D. and possibly by other agencies. For example, EPM assistance in tracking, analyzing and reporting A.I.D. biodiversity activities to Congress has contributed to increasing Congressional commitment to A.I.D. leadership in this field. Several analyses potentially have contributed to strengthening commitments by other development agencies and institutions, for example, the report on suggested donor activities to the Development Assistance Committee of the Organization for Economic Cooperation and Development.

In addition to these analyses, the EPM biodiversity program is the vehicle through which the Center is a member of the implementing consortium for the S&T/FENR Biodiversity Support Program (BSP). The Center, with EPM support, played a lead role

in forming the BSP consortium. Walter Arensberg and Nels Johnson serve as member and alternate member, respectively, on the executive committee of the BSP. Through the executive committee decisions the Center provides guidance and shares its expertise and approaches with the lead implementing agency, the World Wildlife Fund, and the other consortium member, the Nature Conservancy.

Biodiversity activities have drawn on staff capacity and experience of WRI beyond that of the Center as well as other collaborators. WRI is in a program partnership with the World Conservation Union (IUCN) and the United Nations Environment Programme (UNEP) and other NGOs and scientists in development of a Biodiversity Conservation Strategy and Action Program. The Program is engaging in research and policy and strategic advice in such countries as Brazil, Costa Rica, Kenya, India, and Indonesia. The focus is on clarifying ownership of genetic resources, promoting local preservation measures, and seeking to reconcile conflicting forest management regimes. The Program has generated widely read research studies including "Keeping Options Alive: The Scientific Basis for the Conservation of Biodiversity (1989)", and "Conserving the World's Biological Diversity (1990)."

3. Conclusions

Several characteristics of the biodiversity program are shared with other EPM programs. First, the focus of biodiversity activities has been on analyses that support policy development and implementation. Second, the Center's biodiversity work directly addresses the connection between development and environment. The Center's participation on the executive committee of the BSP is a means for A.I.D. to strengthen the link between biodiversity conservation and economic development. Third, biodiversity assessments and other activities have depended on, and helped build as an operational mode, developing country technical capacity. The biodiversity activities of the Center have been marked by the same concern for local ownership and public participation that is evident in other efforts of the Center (such as support for community participation in NRMSA activities).

A major constraint to development by the Center of the biodiversity program has been lack of staff and financial resources to engage in follow-up activities to field level activities. This has particularly hindered the Center in assessing, both at an activity and program level, the impact of its efforts. With little opportunity for feed-back and a long-term view on activities, it is difficult to expect the program to keep up with changing priorities and to build on its experience.

The Center continues to offer a unique contribution to A.I.D.'s

biodiversity conservation program that will supplement other programs. The Center can contribute: expertise in policy development, expertise in forging practical linkages between natural resources management and development, an operating mode of dependence on developing country ownership and public participation, and an institutional skill for developing broadly applicable tools and methodologies for addressing natural resources management issues, of which biodiversity conservation is one component.

4. Recommendations

The Center could work to develop an image for itself so that other institutions and A.I.D. can recognize and take advantage of the Center's particular expertise in biodiversity conservation.

New and emerging priorities towards which the Center, in collaboration with greater WRI, could contribute at the policy level include:

1. development of consensus on intellectual and genetic property rights
2. linkage of biodiversity conservation to NRM and planning
3. integration of the concern for biodiversity conservation in other environmental sub-sectors such as agriculture and forestry
4. resolution of conflict between meeting human needs and protection of biodiversity
5. development of techniques of ecological restoration to rehabilitate degraded areas
6. oversight of the World Bank's increasing programs in biodiversity conservation, especially under the Global Environmental Facility
7. development of methods and approaches to conservation, such as for setting conservation priorities at different levels from global to local.

B. Tropical forestry and land use

1. Introduction

While tropical forestry is not one of the identified theme areas within EPM, EPM provides support to some Center involvement in the area through the Center's Tropical forestry and land use activities (TFLU). This program or theme area is primarily funded by other (non-A.I.D.) public and some private donors and EPM funding is limited to salary support when TFLU activities are closely related to specific EPM purposes. (See Appendix 3 and the supplementary Appendix volume.)

The TFLU theme centers on policy analysis of tropical forestry

issues, primarily in the context of the Tropical Forestry Action Plan (TFAP). The program monitors the second TFAP program at both the international and national levels, giving voice to criticisms and building consensus for specific reforms, especially promoting the level and quality of NGO participation. Second, it provides assistance to specific country or regional TFAP plans. Third, the program assists with other country level forest policy reviews, most of which serve as preparatory steps in development of a TFAP plan.

2. Findings

The TFLU program occupies a special NRM niche, with facets comparable to other Center activities. The program is primarily concerned with supporting the development and implementation of appropriate forestry policies that address root causes of forest loss and that promote sustainable use of forest resources. The Center works toward policies that are based on cross-sectoral integration, local institutional capacity, land use planning, and participation of NGOs as a means for incorporating grassroots needs and perspectives.

The Center is active in a variety of fora that address forest policies. For example, the Center is preparing background papers on tropical forest policy for UNCED, has contributed to the development of U.S. Government positions on a potential global forestry convention, and was called upon by the World Bank to assist in development of its revised Forest Policy. The Center also serves in an official capacity and in an advisory role in several international fora, for example, the Tropical Forestry Advisors Group and the UNCED Working Group on Forestry. The extensive experience, especially through support to country level TFAP plans, provides the Center with the credibility it needs to engage in these international level policy dialogues. With special A.I.D. support (complementing EPM salary support), the Center conducted in March 1991 in Washington, D.C. the Colloquium on Institutional Management of Tropical Forestry.

Increasing NGO participation is the major objective for the Center's TFAP monitoring program. The TFLU program has been deeply involved in the recent round of review of the TFAP. The Center contributed a major review on the first five years of TFAP implementation, "Taking Stock," that was supported by four working papers, three of which gave voice to concerns of local peoples.

The Center has directly supported or is currently involved in country TFAP plans in Guatemala, Ecuador, Burkina Faso, Zaire, Thailand, Indonesia, and Cameroon, and two regional plans in the CARICOM islands and Central America. The focus of support to these efforts has been on increasing the extent to which these plans are country-driven and reflect grass roots needs and

perspectives. For example, the Center works to increase consideration of non-industrial forest uses, such as community forestry projects and agroforestry.

Programmatic costs of the TFLU program are supported by several non-A.I.D. grants, from private foundations (Moriah Foundation, Rockefeller Foundation, Pew Charitable Trusts, and Atkinson and General Services Foundations), other development agencies (GTZ, CIDA, FAO, World Bank, and Netherlands Ministry of Foreign Affairs), and from WRI itself. EPM support to the program has been primarily in the form of staff and Center support. The flexibility of the EPM project has facilitated this extensive co-financing.

The Center turns largely to non-A.I.D. support for its work in tropical forestry, because another S&T/FENR project (the Forestry Support Program) is the primary vehicle within A.I.D. to provide technical assistance in forestry. The Center consciously avoids EPM competition with the Forestry Support Program. At the same time the Center believes that there is a pressing need for assistance in tropical forestry issues and that the Center has something unique to offer.

3. Conclusions

The Tropical Forestry and Land Use program area is an important link between the Center and the rest of WRI. This linkage existed before the merger, through cross-overs of staff and collaboration on activities. WRI's strengths in policy analysis, data management and publications have strengthened the Center's efforts to monitor the TFAP program.

The TFLU program shares with the biodiversity and sustainable agriculture programs a concern for integrating tropical forestry into overall natural resources management and planning. These programs are linked by a commitment to integrate forestry with other environmental subsectors and to avoid its compartmentalization, which increases the risks of marginalization.

4. Recommendations

The TFLU program should continue to play its unique role in increasing NGO participation in tropical forestry issues, especially in the context of the TFAP framework, as a means of incorporating needs and perspectives from the grassroots level.

The EPM project could be used as a means of providing technical expertise to assist in country TFAPs, for example, in promoting NGO participation.

Consideration should be given to EPM funding TFLU activities

directly, possibly as part of a theme area combined with efforts in sustainable agriculture and biological diversity, as recommended above.

C. Gender framework for NRM

1. Introduction

The evaluation TOR (Appendix 5) raises at several points the matter of gender considerations in NRM generally and EPM in particular:

- "Although gender issues were not an explicit program component, how were gender issues dealt with in project implementation?" (TOR p. 9)
- "[W]hat insights on the role of women in natural resources management have been gained through the project's 'important stakeholder' analysis?" (TOR pp. 5-6)
- "What recommendations can be made regarding how new projects can address the role of women in natural resources management and gender-related issues in the sector? For example, in this project were gender issues effectively integrated into the overall program or should future projects include explicit program components addressing gender issues?" (TOR p. 10)

2. Findings

In its own responses to the TOR, the Center states as follows with respect to the several gender-related questions (Briefing Book 1991):

"In the course of its work, the EPM program has encountered extraordinary gender bias in the analysis of natural resource management issues. Women's roles as resource conservators, farm managers, energy providers and as educators are ignored. The NRM 'analysis community' is male dominated, and few trained female resource economists, scientists, and other specialists are part of NRM policy planning teams. Even fewer womens' NGOs are consulted during field missions."

A.I.D.'s own policies concerning gender issues in NRM are noticeably thin. The A.I.D. May 1990 Initiative on the Environment first refers to gender issues in the last two sentences of the document's last page, stating that A.I.D. will "include gender considerations" in its ENR focus areas. The S&T/FENR Action Plan for Fiscal Year 1992 makes a single reference (p. 22) to gender-specific issues, with an action

neutral statement that "women play an important role in preparation of fish for their families and in marketing the products of both aquaculture and capture fisheries."

The 1990-91 World Resource Report states (WRR 90-91 p. 10) that in a world-wide survey "women surveyed were more aware and concerned about environmental degradation than were men." The report points out, however, the constraints to women to act on their awareness and concerns (WRR 90-91 p. 92):

"African women produce roughly 70 percent of staple food. Women in many cultures are allocated fields from their fathers' or husbands' land, are responsible for specific crops and operations, and may receive independent income from marketing certain crops. As more men work in cities, women's responsibilities for farm management increase; in many areas, women manage one half the farms. In parts of Africa, women provide 60-90 percent of the subsistence agricultural labor force. Most land registration and land settlement schemes result in husbands' registering as sole owners. Lacking land titles or security of tenure, women are often unable to buy fertilizer and other inputs on credit.

"Formalizing women's rights to land, increasing their representation in agricultural training, encouraging extension workers to include women farmers among their contacts, improving their access to technology and tools, and fostering access to credit for women's groups are among the many initiatives that could help African agriculture."

Center NGO partners (for example, in Rwanda and Kenya) emphasized the importance of gender considerations both in NRM planning and NRM activities. In Rwanda the draft NEAP was substantially changed, after an EPM-prompted stakeholder analysis, to incorporate emphasis on research and understanding of gender issues in NRM. The initiative for this change came from NGOs that had been brought into the process through EPM support. The development of the gender framework for the Nepal NCS quoted below was primarily the responsibility of the NGO community in Nepal.

The Center's research on renewed involvement in sustainable agriculture stresses the importance of women's groups and individual women farmers, to promotion of agriculture "which is equitable, environmentally sound, and economically productive." (Center internal memo May 1991)

In light of these considerations, the evaluation team found it surprising that gender considerations did not rank higher in EPM's approaches for sustainable development through NRM planning. While it is true that the EPM cooperative agreement did not

specifically mandate a leadership role on gender issues in NRM, the evaluation team believes that this may be one area where the Center has not absorbed well and acted upon its own experience from direct grassroots involvement in NRM.

Evaluation team review of EPM- supported documentation also revealed a relative lack of attention to gender issues. For example:

1. Gender was not a focus of IPT, and the documentation suggests there was no factoring in of gender specific resource use interests and impacts;
2. The April 1990 Center proposal to Africa Bureau on developing a set of country level indicators for natural resources covers a number of questions pertaining to land and water use, biodiversity protection, and forest protection, but there is no mention of gender;
3. The April 1991 EPM supported design study for an environment resources information center (ENRIC) does not illuminate options that might give greater understanding to gender-specific NRM issues.
4. The January 1991 Center framework review for NRM indicators in Africa seeks to cover "sustainable increases in income and productivity through better management of gender issues", yet makes no mention of gender issues. Nor is there mention of gender in the March 1991 draft of the "Whole Earth Indicator Catalogue for Use with NRM Framework."

3. Conclusions

There are gender-specific constraints in the NRM process, manifested at various points in the continuum, from participatory planning through implementation. EPM has shed some light on these constraints, although in an unsystematic fashion and without substantial evidence that EPM and the Center have fully reacted to their own evidence of importance of gender awareness in NRM. This inattention by the Center is surprising in light of the Center's own commitment to illumination of issues of equity and empowerment as furthering developmental and environmental balance.

The evaluation team did not have opportunity to examine the gender issues in EPM and NRM to any substantial degree. The Center itself acknowledges that this is an important NRM area and its 1992 work plan now being developed is expected to identify specific gender-related inquiries and actions under EPM.

As guidance for establishing a gender framework for NRM, we quote here at length from a publication by an organization in Nepal, Leaders, Inc., that has received non-EPM support from the Center. This is a June 1990 report on the national seminar on women as environmental conservation and resource managers held in Kathmandu as part of Nepal's National Conservation Strategy. In a background paper on the role of women as resource managers in Nepal, the report outlines as follows some of the options which could be considered in efforts to improve the NRM status of women (Leaders 1990, pp. 43-44)

"Policy Formulation

- Resource management policy should address household level participation and responses to depletion of resources. Gathering of fuel, fodder and other forest produce should be recognised as an economic activity to provide an impetus to improvement of conditions in this sector.
- The limited access of women to resources, particularly land, presents a major constraint to the effective participation of women in resource development. Issues regarding the ensuring of tenurial security for women need to be addressed at policy level.
- While designing agricultural and forest processing and marketing policies, efforts should be made to incorporate special policies in regard to products with significant current or potential involvement of women. The time availability of women should also be examined carefully.
- Policies should encourage individual women/women's group involvement in resource development committees.
- Policies should also be developed to provide alternative resources in situations where environmental conservation programmes restrict the use of natural resources.

"Technology Research and Development

- Technology research and development personnel should be conscious of gender issues. In the designing of agricultural technologies, and technologies pertaining to agroforestry and social forestry, special consideration should be given to women-specific activities and women-specific crops as well as to plants and plant products gathered by women.
- Research and development should also focus on plants

and activities that yield potential for profitable processing and marketing by women. Technical information on pest and seed management should be provided to women.

- Women must be involved in technology development and dissemination processes, both as clients and as professionals.

"Participation and Rural Development

- Line agency personnel and local communities should be encouraged to develop positive attitudes towards women's involvement in the resource management system. Any attempt to reach women and encourage their participation should be preceded by an effort to convince community leaders and men within the community of the viability of women's involvement. The traditional role and degrees of independence of women should be carefully assessed before implementing any resource management programmes.
- Women often have a more responsible attitude towards resource degradation because of the important role resources play in their daily lives. Women can be motivated to participate in resource management to a greater extent by making them aware of the potential hardships they and their families would face as a result of continuing depletion of resources. It should be borne in mind, however, that an effort to encourage women's participation should not create false expectations in regard to possible results.
- Jobs for women professionals should be ensured, so as to encourage the further participation of women in resource development."

4. Recommendations

(a) The evaluation team strongly recommends that the Center and A.I.D. not await EPM II to address gender issues in NRM but attend to this gap during the remainder of EPM I. The Center should immediately -- within the current EPM project -- study and develop a gender-related overlay to its work in NRM. The need for development of a gender framework for NRM, as well as the information and insights upon which it might be based, should be apparent within the Center's own experience in and commitment to grassroots and equitable approaches to NRM.

(b) Attention to gender specific constraints to NRM -- both at the grassroots as well as at the policy levels -- should be a central part of the design of EPM II.

(c) The Center should consider ways in which the Nepal gender framework quoted above might be applicable to the work of the Center. The evaluation team suggests that this extend to examination of ways of encouraging and ensuring jobs for women professionals in the NRM field, particularly within such high profile institutions as the Center itself.

V. Impact of EPM Cooperative Agreement on the Center for International Development and Environment

A. Introduction

The evaluation TOR (Appendix 5, p. 10) poses questions on the impact of the cooperative agreement on the Center as an institution. These questions relate both to how EPM resources and implementation experience have affected the Center's technical capacities and systems, and the institutional effects of the cooperative agreement mode itself. The TOR inquires beyond EPM, but based on EPM experience, to the suitability of the cooperative agreement mode.

B. Findings

1. What institutional impact was intended?

EPM aims at strengthening institutional capacities of developing country institutions, of the Center, and of A.I.D. itself. The financing instrument used is an A.I.D. cooperative agreement, which is an assistance instrument (a grant, albeit restricted) as distinguished from a procurement instrument. However, centrally-funded cooperative agreements such as EPM combine features both of assistance and procurement, particularly with buy-in provisions permitting A.I.D. regional bureau and USAID mission requests for EPM assistance.

EPM's intended impact on the Center is not clearly defined in the planning and work plan documents but can be reasonably inferred from the program tasks assigned by EPM.

The EPM Cooperative Agreement is intended to increase the Center's capacity to improve developing country NRM planning capacity. As stated in the 1985 revised cooperative agreement, EPM is meant to

"enhance [the Center's] existing competence and capacity to expand that organization's program while at the same time bringing such a program to bear upon specific developmental priorities of A.I.D. and the rest of the donor community."

The intimacy of the A.I.D.-Center relationship through EPM is demonstrated by EPM's rationale for strengthening the Center. The 1989 project paper supplement cited (p. 12) its aim to

"maintain and expand [A.I.D.'s] ability to address critical natural resources management and environmental issues in the developing world."

Thus, the project paper supplement (p. 14), combining findings on EPM effects up to 1989 with aims for the future, equated

strengthening of the Center with strengthening of A.I.D. in NRM capacity:

"The Center's capabilities [in NRM] have grown along with those of the Agency, and strengthening the Center has also served to strengthen AID."

The 1989 Project Paper Supplement made it clear that the project was intended to sustain and expand the Center's capacity to be at the cutting edge of ENR programming (pp. 14 and 51):

"With [the proliferation of non-EPM] IQCs and level of effort contracts, the Center can [through EPM] further seek to achieve greater program coordination and integration to enable the development of strategies for improved environmental management....EPM offers some institutional memory, consistency and continuity to AID programs. The program approach being taken in [EPM] provides overall support and guidance to the Missions, Regional Bureaus and host country institutions. It is the more proactive, long-term and overarching perspective that should appropriately be offered through S&T programs. Continuation of the EPM project with the Center will permit further field testing of lessons learned, particularly between regions, tools and techniques developed, and assess these approaches to guide future directions of the Agency in the environmental sector."

While the cited provisions of the Cooperative Agreement and the Project Paper Supplement give some general guidance on EPM's intended impact on the Center, specific guidelines for institutional strengthening were not spelled out. The project paper supplement provided that in spring or summer 1989 there would be a management study of the Center that would examine and define institutional strengthening objectives for the Center under EPM over the period 1989-1992. The issues to be addressed in the 1989 management evaluation (project paper supplement, pp. 53-55) included establishing objectives and defining actions for institutional strengthening of the Center. The management study was not conducted for reasons which the evaluation team has not been able to define. It is the team's best understanding that the study was deferred by mutual understanding of the Center and S&T/FENR because of press of other matters.

2. What institutional impact was achieved?

The Center's institutional and technical capabilities have been strengthened from implementing EPM in the following major respects:

1. The Center has gained a capacity to integrate the several program theme areas that make up the EPM

package. The evaluation team's findings and conclusions under each of the theme areas (Sections III and IV of this report) support the overall determination that there is an observable linkage and inter-relationship among the theme area activities.

2. The Center has gained an observable capacity to manage change. Again, this report's treatment of each of the theme areas has stressed the evolutionary nature of the EPM project within the broader context of global concern and involvement in NRM. The Center's learning process approach -- basing future plans and activities upon information and experience gathered from its involvement in EPM -- is recorded in the work plan documents of the Center, in the Center's input into the documentation underlying the 1989 project paper Supplement, and in the content and style of the materials assembled by the Center for this final evaluation. The Center's operating style is one of continually building on experience and cross-fertilization.
 3. The cooperative agreement's flexibility enabled the Center to adapt its programming and staffing priorities to conform to emerging, evolving roles;
 4. The cooperative agreement's buy-in mechanism, supplementing the centrally administered core funding, has made the Center party to Regional Bureau and USAID mission NRM initiatives and activities. These buy-ins often present Center management with a challenge of balancing between client-responsiveness and achievement of the Center's mission. On balance, however, there is a basic consistency between the Center's mission and the activities funded by the buy-ins.
 5. The cooperative agreement has facilitated complementary (non-A.I.D.) financial and program linkages thereby expanding the Center's NRM work. (An example of complementary financial links would be the foundation relationships for the From the Ground Up program; EPM-facilitated programmatic links strengthening the Center's capacity and role are illustrated by the World Bank NEAP relations.)
3. Who controls the substantive direction of the project?

The Center controls EPM's substantive direction.

This control is exercised collaboratively with S&T/FENR (as agreed through the annual work plan process) and with a high level of responsiveness to USAID missions and regional bureaus.

Perhaps the most pertinent example of the Center's lead but collaborative role is found in the development of 1989 EPM project paper supplement. This extension and revision to the project was based in large measure upon the Center's 1988 work plan (as agreed with S&T/FENR). The 1989 project paper supplement was initially drafted by the Center and, when approved by A.I.D., served as the Center's work plan for 1989 as well as for charting project direction through its August 1992 term.

EPM activities are essentially coterminous with the Center's overall program. In an informal 1990 annual report of the Center, the Center Director stated as follows (Fox T., Dec 26 1990. Memorandum to friends of CIDE/WRI):

"Virtually all of the Center's work falls under the general framework of environmental planning and management, strengthening institutions and policies for effective natural resources management. [This is] funded in large part by a cooperative agreement with the US Agency for International Development."

The cooperative agreement helps the Center to move toward fulfilling its program vision which is described as follows in a draft of the Center's 1992 work plan made available to the evaluation team (undated memorandum):

"The Center...works in individual countries throughout the developing world. The Center promotes and helps to define sustainable development -- social and economic development that is in harmony with and can be sustained by the natural resource base for future generations. Its special niche is finding the best possible relationship between effective natural resource and environmental management, and sustainable economic and social development."

The EPM cooperative agreement, through the core funding and the buy-ins, and its flexible terms permitting syndication of EPM efforts with NRM activities supported by the World Bank and others, makes the Center an important player within the array of development agencies linking development with environmental and natural resource concerns. A.I.D. in the last decade -- partly on its own volition and partly in response to public opinion expressed in legislative enactments influencing A.I.D. -- has largely set the pace for merging development and natural resource concerns. The opportunities available to the Center for achieving its institutional objectives through its association with A.I.D. in the EPM project are vast.

The 1989 project paper supplement discussed the possible tension within the EPM framework between core funding and buy-ins (p. 14):

"In the past...the Center responded to many of the varied [mission] requests for assistance in order to gain access to the missions and to field opportunities. While this enabled the project to work in a wide number of countries, it, in part, dissipated the real impact of the project."

The level of EPM buy-ins runs roughly equal to core funding of the Center through the Cooperative Agreement:

<u>Fiscal</u> <u>Year</u>	<u>Buy-in As</u> <u>% of Core</u>
1985	20%
1986	125%
1987	.5%
1988	35%
1989	59%
1990	48%
1991	est.50%

(Source: Figures 1, 6)

The evaluation team does not find evidence that the buy-in process, at least in the two years since the 1989 project revision, has operated to the detriment of overall EPM project effectiveness. In other sections of this report the evaluation team discusses some concern that NRDM buy-ins have not been well linked to developing country institutional strengthening (Section III.C) and that the parking of training and PD&S funds within EPM for administration (Section VI) dilutes S&T/FENR attention to the focussed programmatic aims of EPM encompassed in the cooperative agreement.

C. Conclusions

1. The evaluation team has found that the EPM cooperative agreement has had a positive impact on the capacity of the Center to strengthen the capabilities of public and private institutions in developing countries to better manage and conserve their natural resources by incorporating NRM into development planning.
2. A cooperative agreement is a suitable mode for NRM planning. The Center controls the substantive direction of the project, so the grant aspects of the EPM Cooperative Agreement are appropriate, to assist the Center to have the resources and the capacity to attain the EPM objectives. At the same time, the Center's objectives are themselves objectives shared with A.I.D., so that attainment of EPM objectives is mutually desired by A.I.D. and the Center. The substantial involvement of A.I.D. in EPM through a

cooperative agreement enables A.I.D. to influence EPM direction without impinging on the management prerogatives of the Center.

3. EPM financial support was essential for the emergence of IIED/NA as a significant participant in NRM activities and, thus, for the establishment of the institutional capacity that has become the Center. While the Center continues to diversify its funding sources, current levels of EPM funding (core and buy-in), together with the programmatic and policy entree available to the Center through the A.I.D. association, remain essential for the Center to carry out its institutional objectives.
4. The major management evaluation and study intended by the 1989 Project Paper Supplement was to define the institutional strengthening needs of the Center that could be met in the remaining three years of EPM. The fact that the study was never performed quite likely diminished the beneficial effect of EPM upon the Center's institutional capacity.

D. Recommendations

1. Continue the cooperative agreement mode as the financing instrument for EPM, particularly as the best means to insure blending of mutual A.I.D. and Center objectives.
2. Continue the buy-in feature of the EPM cooperative agreement. However, an EPM II design effort should pay particular attention to
 - (a) clarity in definition of EPM objectives and the strategy for marketing EPM to regional bureaus and USAID missions, providing guidance on the germaneness of requests for EPM participation and criteria to EPM management in determining an appropriate response to requests;
 - (b) determination of the extent to which A.I.D. buy-ins are or can be demonstrated to be linked with developing country NRM capacity building.
3. The unaccomplished 1989 management study should be revisited and incorporated into a strategic planning exercise by the Center as part of its design and preparation for a follow-on EPM project. This study would be particularly relevant to determining

assistance elements for an EPM II cooperative agreement.

VI. Project Implementation

A. Introduction

The evaluation TOR (Appendix 5, pp. 8-10) asks questions concerning EPM project implementation. These questions relate principally to the role and performance of the Center although they include questions on the level and quality of A.I.D. involvement in EPM activities.

Much of the factual basis for the evaluation team's assessment of project implementation issues is reviewed elsewhere in this report.

B. Findings

1. Activities

In the context of NRM planning (see Section III), EPM works both from the top down and from the bottom up, with varying points of entry into the NRM continuum. The NRMSA activities have tended to start at the higher, policy levels followed by efforts to incorporate grassroots perspectives. In the case of the World Bank sponsored NEAPs, EPM has been increasingly drawn into the process particularly so that it might play this linkage role. In the case of the NGO support and sustainable agriculture activities, EPM has tended to start more at the grassroots level and then through more localized planning processes or publications strategies bring the grassroots experience to the attention of policy makers.

From an EPM process standpoint, the formal initiation of EPM involvement remains largely a function of client request -- with the requestor usually being A.I.D. or the World Bank. The EPM Cooperative Agreement's work plan process serves as an important focal point for forward planning and filtering of likely requests. The Center has well established communications channels with the A.I.D. regional bureaus and an increasing number of USAID missions, so the Center is able itself to influence to some extent the location and nature of requests long before a formal request for EPM involvement has been made.

When requests are made for EPM involvement in the NRM process, the requests are usually expressed in terms of a particular set of tasks or functions and are not expressed in terms of the EPM program theme categories. As discussed in Section III, the EPM program theme areas are closely linked in practice and conceptually; together they represent a policy and institutional

framework for NRM strategy, planning and action, embodying characteristics of participation, flexibility, collaboration and capacity building. The program theme areas are closely interrelated and increasingly interchangeable.

As noted above, the evaluation team received communications (interview, telephone, cable) from 42 USAID missions. The evaluation team found from the mission contacts that a major constraint to EPM implementation is that the EPM project itself is either not known or is poorly understood by a large number of missions. This is in part due to periodic mission staff turnover and a to a rather consistent expression that EPM had not been actively marketed with the missions.

Regional bureau expressions on EPM possible implementation constraints were limited to somewhat generalized concerns that the increasing interest of USAIDs in NRM activities might lead to a level of buy-ins and demand that could exceed Center staff capacity. These expressions of concern were not framed as a complaint against EPM or the Center.

At the level of S&T/FENR involvement of EPM, the evaluation team found two principal constraints on project implementation:

1. Because of limited travel funds for FENR staff, and increasing demands beyond EPM upon S&T/FENR staff, S&T/FENR in recent years has not had opportunity for major involvement in EPM activities beyond an administrative and supporting role. These limitations have diminished the potential of EPM as an instrument of learning within S&T and A.I.D, learning that would typically be channelled through the S&T/FENR project manager.
2. A major barrier to proper S&T/FENR attention to EPM is the enormous demand on the time of S&T/FENR EPM support staff to administer, under EPM, A.I.D. activities largely unrelated to the EPM programmatic themes and not part of the EPM Cooperative Agreement. Through an EPM project authorization amendment in February 1990, the EPM project purpose was amended to facilitate the ability of S&T/FENR to administer program development and support (PD&S) activities under EPM in addition to the EPM activities under the Cooperative Agreement. For FY 1991 the EPM PD&S activities -- administered by the S&T/FENR project officer for EPM -- include S&T/FENR program staffing, environmental quality project design, environmental training for A.I.D. and developing country personnel, and design and development of the environmental resources information center (ENRIC). The total amount of PD&S funds to administered under EPM in FY 1991 exceeds the total

amount of core funding that the Center will receive this year through the EPM Cooperative Agreement. Thus, S&T/FENR opportunity for attention to the EPM Cooperative Agreement has been substantially diluted by other responsibilities.

EPM project activities are monitored by Center management and S&T/FENR with reference to the annual work plan's projection of activities. Monthly activities reports serve both to keep A.I.D. informed of project activities but also to assist Center management and staff in meeting program commitments. While EPM monitoring is adequate, there is no internal program evaluation system. Thus, there is no systematic approach within the EPM project for assessing impact of EPM work on institutional strengthening for NRM in developing countries or for gauging whether the NRM activities themselves contribute to the developmental or environmental goals of the EPM project.

2. Structure and Performance

(a) Client satisfaction

The 42 USAID missions and the A.I.D. regional bureaus consulted during this final evaluation generally expressed satisfaction with Center performance. National institutions (Government and non-Government) and international collaborating organizations (e.g., World Bank, major U.S. environmental and conservation NGOs) generally commended the technical competence, responsiveness, and performance of the individual Center staff with whom they have worked.

One measure of A.I.D. satisfaction with EPM (and Center) performance is in the substantial increase of regional bureau and USAID mission buy-ins, discussed above. A Center analysis (Figure 1) shows that the core:buy-in ratio increased from 4:1 in 1985-87 to 1:1 in 1989-90, and it is expected to be the same for FY 1991.

In addition to USAID mission satisfaction with substantive performance of the Center under EPM, the missions also generally expressed preference for buy-ins via the cooperative agreement mode over alternative mechanisms such as indefinite quantity contracts, personal services contracts, or purchase orders, or buy-ins to regional bureau projects. Major advantages cited included:

1. speed of response (e.g., Center can send someone to a mission on the order of a few days)
2. less administrative and management work for A.I.D. and therefore lower operating expenses
3. ability to draw repeatedly on same people and to build on past efforts

(b) Center strengths and weaknesses

The Center's organization chart is contained in Figure 7. The Center operates generally on a matrix basis, intersecting at common technical, geographic, and EPM theme points. This horizontal management structure (in contrast with a vertical or more hierarchical structure), with its premium on shared decision making and shared labor, is well suited for a multi-disciplinary, vision-drawn organization. As far as EPM performance is concerned, the Center has handled well the formal and informal communication challenges of such a management approach, although it leaves the Center vulnerable to gaps in recording of decisional processes.

Establishment of the Center within WRI in the wake of the merger of IIED/NA with WRI has absorbed substantial Center and WRI leadership and management attention over the past three years. The merger activities are essentially, and successfully, completed. The Center retains an important identity within WRI as a center of energy and excellence in identifying and engaging grass roots stakeholders in NRM policies and actions. While the Center addresses much of its activities to national and local NRM policy, planning, and action, it also -- from that base and perspective -- contributes to WRI's capacity and standing for trans-national approaches to understanding and dealing with sustainability of the earth's natural resource endowment.

There are some particularly strong attributes of the Center's structure and management style and capacity, contributing to generally very positive performance under EPM. These attributes include the following:

1. The Center preserves its vision-drawn style, carrying forward the original commitment to human and environmental needs that characterized IIED/NA before there was an EPM; while the Center's growth and viability over the years have been largely functions of A.I.D. financial support, the Center has not become a product or agent of A.I.D.; the Center's preservation of its identity, and its affiliations and networks unavailable to A.I.D. as a government entity (and donor) enable the Center to bring to its EPM partnership with A.I.D. independent outlooks on NRM and flexibility of action not possible for A.I.D. itself;
2. The collegial style and ease of internal communication at the Center foster cross-fertilization among the various technical and skills areas and across the several program area themes; this style is not accidental, but is something the Center management and staff work at consciously;

WRI Center for International Development and Environment

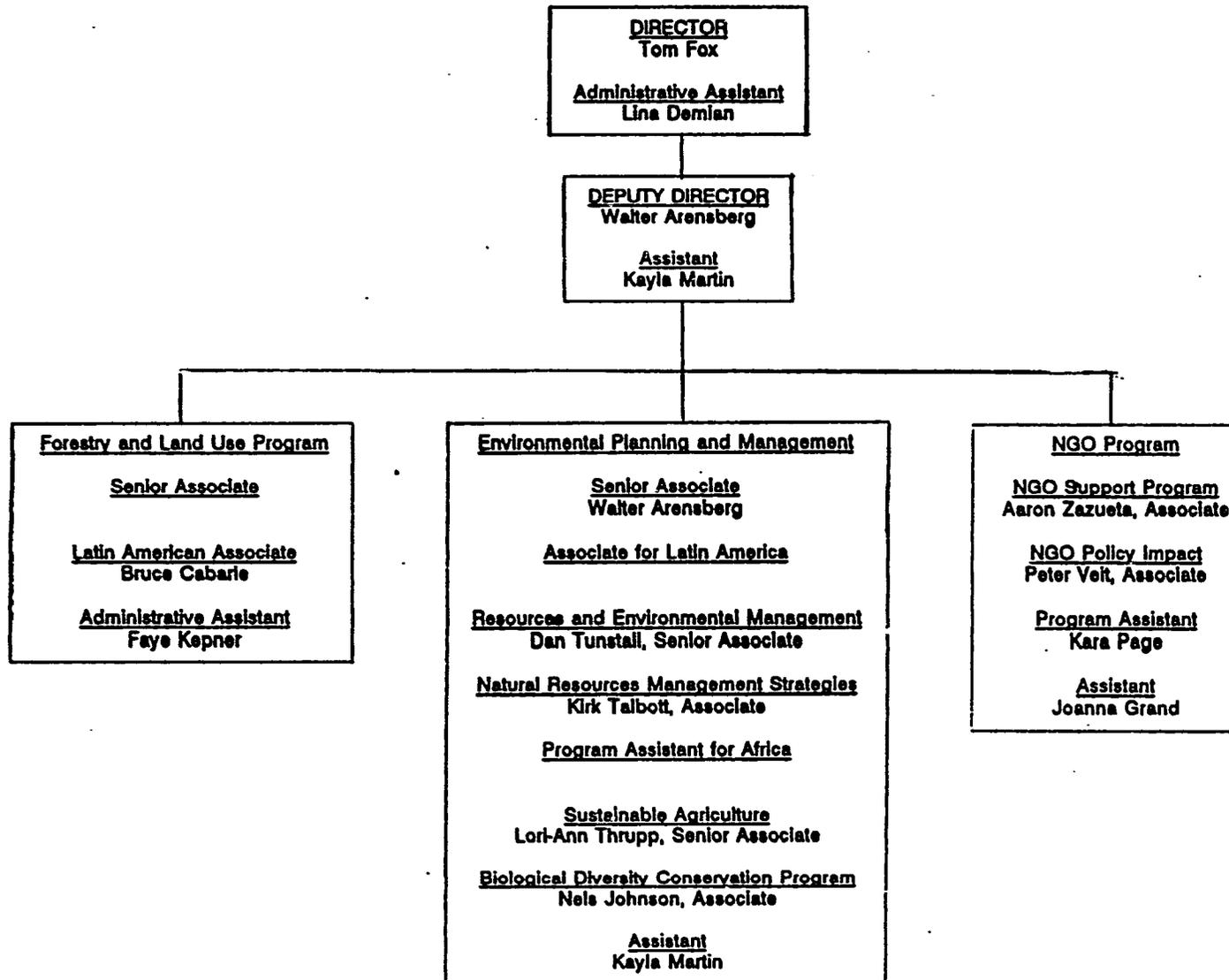


Figure 7

13

3. Since 1987/1988, there has been substantially more disciplined and effective management of the Center; this view is expressed by a number of sources within A.I.D. in Washington. The Center has managed well major changes over this period, including the merger and integration with WRI, a multiplying of the buy-ins to be balanced with core operations, and an array of program and funding opportunities from sources other than A.I.D. The Work Plans have become substantive and increasingly the point of contact for the shared role of A.I.D. and the Center in EPM project implementation. The timeliness and substance of the Center's monthly reports to A.I.D. are an effective reflection of the Center's maturity as an operational entity and the seriousness of its approach to dealing with A.I.D. partners.

While the evaluation team draws generally positive conclusions concerning the administration, structure and performance of the Center under EPM, there are several areas of concern including:

1. As pointed out above, the Center (thus, EPM) lacks an effective on-going program evaluation system.
2. While there are well-defined action programs for distribution of EPM studies (including, for example, the important FGU case studies), there is not a clear publications strategy for the Center.
3. There are gaps in the Center's staffing policies or procedures including the following:
 - (a) There has been a lack of consistency over time in geographical balance in staff expertise.
 - (b) There is some external perception (for example, A.I.D. regional bureaus) that the Center is at or near the absorptive capacity of its permanent staff; this perception is owing in part to a belief that WRI and the Center have established a no-growth or low-growth policy for the institution; the Center's absorptive capacity warrants close examination in light of near term and long term program plans, and corrective actions may be found in a combination of staffing and program adjustments; absorptive capacity should also take into account maintenance both of quality of work as well as progress toward attainment of the Center's mission (in contrast with simply servicing and satisfying clients).
 - (c) Women and minorities are underrepresented on the

professional staff of the Center. There is no apparent strategy by the Center for positive actions to increase the proportion of women or minority members of the professional staff.

4. There is no clear strategy and plan for sustainability of the Center's efforts beyond the period of A.I.D. funding of the Center or sustainability under assumptions of substantially reduced A.I.D. core and buy-in funding.

3. Conclusions

(a) The Center is in essential compliance with EPM cooperative agreement commitments concerning outputs and project administration.

(b) Center administration and management of EPM matters have improved in the past four years as reflected by the quality and contents of the Center's EPM planning and reporting instruments.

(c) Overall, the Center has provided appropriate technical assistance with timely and effective services in EPM. This conclusion is drawn both from evaluation team assessment of the Center's contribution to achievement of EPM purpose objectives and from expressions of client satisfaction.

(d) EPM is still heavily request-oriented, but (a) the Center is increasingly able to influence the nature and scope of the requests for EPM participation, and (b) the requests increasingly call for activities that the Center agrees are consistent with EPM purposes and, thus, with attainment of the Center's objectives. Even so, there are continuing gaps in USAID mission appreciation of what EPM can and cannot be expected to do.

(e) There are advantages to the cooperative agreement buy-in mechanism which the USAID missions see as desirable both from the standpoint of substance as well as convenience and, thus, contribute to USAID mission interest in involving EPM in mission activities.

(f) The Center is a soundly managed and functioning organization. The merger with WRI is essentially and successfully completed. The structure and management capacity and style of the Center are well suited for implementation of EPM.

(g) There are several important weaknesses in the Center, including

1. absence of a program evaluation system

2. gaps in staffing policies and procedures, including in such matters as geographical balance and gender and minority representation
 3. lack of a clear publications strategy
- (h) S&T/FENR is constrained in its EPM performance by
1. lack of resources and opportunity for a more substantive involvement in EPM, including serving as an "inside" channel for A.I.D. learning more from the EPM experience, and
 2. substantial (and perhaps excessive) use of the EPM project to channel funds outside of the EPM cooperative agreement.

4. Recommendations

- (a) The Center should
1. develop and put into place a program evaluation system for EPM
 2. develop an EPM publications strategy
 3. review its staffing structure, policies and procedures in light of geographic and technical needs
 4. establish staffing policies and procedures to increase the participation of women and minority professionals
 5. examine its future sustainability under varying projections of reduced A.I.D. core funding.
- (b) The Center and S&T/FENR should
1. examine and adopt means to increase USAID mission awareness of the purposes, capacities, and limits of EPM, and
 2. study and seek necessary remedial action on the constraint to EPM effectiveness resulting from substantial use of EPM for purposes not covered by core features of the EPM cooperative agreement
- (c) S&T/FENR should try to find ways to increase its substantive involvement in EPM.

VII. Recommendations for EPM II

A. Introduction

The earlier Sections of this report have offered findings, conclusions and recommendations on the constituent elements of EPM. This closing Section draws some overall conclusions on the EPM project and presents recommendations for the design of EPM II.

B. Conclusions

1. There is substantial evidence to support the conclusion that EPM has made significant progress towards achievement of the project purpose of strengthening the capabilities of public and private institutions in developing countries to better manage and conserve their natural resources.

2. With respect to broader project goals, to the extent that EPM's design assumptions about purpose-goal linkages have held true over the nine year span of this project, we may infer - - although this evaluation is unable to document this -- that EPM has made a positive contribution towards goal achievement, including

1. improved quality of life for people dependent on natural resources
2. improved environmental conditions
3. increased sustainability of economic development consistent with social equity.

3. EPM's mix of products and its contributions to NRM processes have expanded over the course of EPM through an evolutionary process. Within the Center, this evolution has been produced by a combination of managed change, conscious responsiveness to opportunity, effective cross-fertilization within Center staff and across theme areas, inevitable responsiveness to factors beyond EPM, and some measure of happenstance. Relative ease of communication between the Center and S&T/FENR facilitated the EPM change process.

4. NRM planning involves the resolution of many complex issues, at various levels (local, subnational, national, regional, global), involving many players besides A.I.D. and the Center, and many inputs besides those from EPM. A programmatic and strategic approach is a prerequisite to establishing the legislative and institutional framework for planning and implementing NRM programs. EPM has followed such an approach, with strategic interventions that were critical milestones in the process of educating and encouraging national institutions (as well as USAIDs and other donors) on approaches to resolving NRM issues.

5. In many respects, the NRMSA project theme has become coterminous with EPM itself. This is particularly true when NRMSA is defined broadly as a policy and institutional framework for NRM strategy, planning and action, embodying the characteristics of participation, flexibility, collaboration and capacity building. Other EPM theme areas, particularly NGO support, are usually related operationally to EPM involvement in NRMSA activities at one or more levels. EPM's recently renewed sustainable agricultural program is clearly more related to NRMSA -- as broadly defined above -- than as a stand alone contribution to agriculture. Theme areas such as sustainable agriculture and NGO support tend to link NRM policy formulation and implementation to the grassroots level. In contrast, NRDM to date has tended to link NRM policy formulation to international experience.

6. EPM has contributed to a general body of knowledge on NRM approaches. EPM knowledge has been captured well within the Center and within project documents for EPM clients. Although EPM approaches have evolved with the Center building on earlier experiences, they have not yet been captured and sufficiently documented, nor adequately disseminated pursuant to a strategic approach to encourage use or replication by others for NRM purposes.

7. EPM has contributed to development, improvement, and/or demonstration of applications of NRM analytical tools including NRMSA guidelines and instruments, NRM modelling, participatory rural appraisal (PRA) methodologies, and NRM indicator development and land tenure policy research methodology.

C. Recommendations

In major part, the following recommendations are drawn from Sections III -VI.

1. There should be an EPM II. Its principal focus should be upon supporting the development of institutional capacity for NRM in developing countries. Salient features should be host country institutional ownership of the NRM processes and public participation at the grassroots level. EPM II project design should also explicitly examine incorporation of urban and environmental concerns into the problems to be addressed by the project.

2. The current EPM NRMSA theme could, with some broadening, be made the overall framework of EPM II. The next EPM should seek to play an active role in influencing regional, national, and subnational natural resource and environmental plans to adopt the participatory, national institution building, bottom-up/top-down NRM linkages, and action-orientation that are the current hallmarks of EPM.

3. EPM II should consider assistance to developing countries in monitoring and evaluating NRMSA development and implementation efforts. The objective would be to illuminate and influence the extent to which NRM policies and plans are ultimately reflected in development and environmental benefits.

4. Development of a specific strategy for NGO-related research and information and dissemination should be given top priority in EPM II. Design studies should also explore the extent to which the project, mostly likely through NGOs, can support public information and education as a strategy to influence NRM policies and plans.

5. EPM II should continue to refine and validate the participatory tools of EPM, including the PRA methodology and the FGU analytical and study approaches. EPM II should consider expanded use of these tools, for example for new stakeholders (e.g., women and children) and new NRM issues (e.g., urban and pollution issues).

6. The NRDM program theme work should be continued and expanded in EPM II, and should be more actively related to the overall purpose of supporting developing country institutional capacity to compile, gain access to, analyze, and use natural resources data in development planning.

7. An EPM II NRDM program should seek to closed the gap between state-of-the art information and data systems and their genuine utility for NRM at the national and subnational levels in developing countries.

8. EPM II should include a sustainable agriculture element generally along the lines currently being designed by the Center. Such an element in EPM II should be considered complementary to other A.I.D. projects specifically aimed at sustainable agriculture. EPM II design should consider folding sustainable agriculture, biodiversity conservation and tropical forestry into a single theme or program area. The overall scope of this program area would be sustainable land use with a focus on methodologies to meet human needs sustainably, through improved NRM planning.

9. Attention to gender specific constraints to NRM, both at the grassroots as well as at the policy levels, should be a central part of the design of EPM II. The new project should develop a specific gender framework for NRM.

10. The cooperative agreement mode should be considered as the financing instrument for EPM II as a means of ensuring a blending of the mutual A.I.D. and Center objectives. Regional and USAID mission buy-in features of EPM should be continued in the follow-on project. The EPM II design effort should pay

particular attention to clarity in definition of project objectives and a strategy for marketing EPM to regional bureaus and USAID missions, providing guidance on the germaneness of requests for EPM II participation and criteria for EPM management in determining appropriate response to requests.

11. The unaccomplished 1989 management study should be revisited and incorporated into a strategic planning exercise by the Center as part of its design and preparation for EPM II. This study would be particularly relevant to determining assistance elements required to strengthen the Center as an institution.

12. EPM II design should emphasize development of a program evaluation system to enable EPM management to assess and plan for attainment of project purposes.

13. EPM II design should examine means to increase S&T/FENR substantive involvement in the project. This should include elimination of constraints on project effectiveness occasioned by substantial use of the project for purposes extraneous to the cooperative agreement.

Appendix 1

Logical Framework Matrix, EPM Project
(February 1982)

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

INSTRUCTIONS: THIS IS AN OPTIONAL FORM WHICH CAN BE OBTAINED AS AN ADD-ON TO THE REPORTING DATA FOR THE PDS REPORT. IT IS NOT TO BE SUBMITTED ON REPORTING DATA.

Life of Project: 5 years
From FY 82 to FY 86
Total U.S. Funding: \$1,500,000
Date Prepared: Feb 2, 1987

Project Title & Number: Environmental Planning and Management 936-3517

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>Program or Major Goal: The major objective to which this project contributes (A-1) Assist LDCs to better manage and conserve their natural resources and environment.</p>	<p>1) Sources of Goal Achievement (A-2) Improved land-use planning and natural resource management capabilities in Missions and LDCs.</p>	<p>(A-3) Project review and evaluation of activities initiated.</p>	<p>Assumptions for achieving goal targets (A-4) Short to medium term technical advisory services are needed and will be given priority and support by Missions and LDC governments.</p>
<p>Project Purpose (B-1) To mobilize and make available technical advisory services to Missions and LDCs in the field of environmental planning and management.</p>	<p>Conditions that will indicate purpose has been achieved: End-of-Project status (B-2) A focal point for expert advisory services and information will exist and the Missions and LDCs will be provided the assistance they need in planning activities to improve conservation and management of natural resources.</p>	<p>(B-3) The number of LDCs which have received assistance through this project, and the number of country projects planned or initiated as a result of the advisory services.</p>	<p>Assumptions for achieving purpose (B-4) 1. Funds will be available to meet the requests from Missions. 2. Missions will provide the necessary support to the advisors. 3. Sufficient top-level expertise can be mobilized to address the problems on which Missions request assistance.</p>
<p>Project Outputs (C-1) 1) Short-medium term advisory services on environmental issues related to: natural resource surveys and assessments, national planning, project design, environmental profiles, legislation, and institutional support- provided in form of field visits or information. 2) Pilot project for assisting one or more LDC in developing national or regional strategy for sustained development and environmental management. 3) Occasional reports and analyses of advisory services and LDC problems.</p>	<p>Magnitude of Outputs (C-2) Planning, and mobilization of expert, and performance of requested advisory services (as stated): FY 82 10 missions FY 83 27 missions FY 84 40 missions FY 85 40 missions 125 missions</p>	<p>(C-3) Communications related to mobilization of experts or information. De-briefing and trip reports from experts. Reports from Bureaus and Missions. Mid-project and end-of-project evaluations. Pilot activity documents and the strategy itself. Evaluations</p>	<p>Assumptions for achieving outputs (C-4) Bureaus and Missions request assistance and provide needed backstopping. Assistance accurately defined and competently performed. Effective contractor management. Expertise available. An A.I.D. Mission and host country are desirous of the pilot project; international coordination is effective.</p>
<p>Project Inputs (D-1) 1) A.I.D. management SST/FNR-3/4 professionals 2) obligations (SST/FNR)</p>	<p>Implementation Target (Type and Quantity) (D-2) 125 advisory missions (estimated). national or regional environment and development strategies 3-5 state-of-the-art reports</p>	<p>(D-3) Internal reports and vouchers.</p>	<p>Assumptions for providing inputs (D-4) Suitable contractor (or contractors) and appropriate contractual arrangement(s) secured.</p>

AN

Appendix 2

EPM Evaluation Memorandum, April 5, 1991

"Retrofitting the EPM Design..."

April 5, 1991

To: EPM Evaluation Team Colleagues
Dr. Arthur Hanson
Dr. John Swallow
Dr. Cynthia Jensen

From: John Rigby

Re: Retrofitting the EPM Design...
1...to refine "Purpose" in order
2...to evaluate "Progress"

- Summary:
- I. An A.I.D. evaluation uses, as benchmarks, the End-of Project Status (EOPS) purpose level indicators of the LogFrame. EPM does not have a current, workable LogFrame, let alone clearly delineated EOPS.
 - II. Usable EOPS can be derived from the Project Paper Supplement, understood in the light of earlier and collateral Project documentation, and reflective of the learning process approach that has characterized EPM.
 - III. Suggested "purpose" level indicators, to guide us in our evaluation, are discussed in Section III with reference to the four "Theme" areas.
 - IV. Our evaluation experience in seeking and applying evaluation indicators for EPM may identify issues related to a future CIDE role in evaluation-related aspects of natural resources management.

Note: This memorandum elaborates on the history and evolution of EPM through IIED-NA and CIDE. While my immediate intention is to clarify the design framework for our evaluation, I will also draw on this material in analyzing the impact of EPM on CIDE as well as the A.I.D.- CIDE relationship.

Possible Lesson: The value, to project implementation, of design flexibility may be inversely proportional to its value to project evaluation. Quere: how to improve the latter without impinging on the former.

I. The Need for Clarification

1.1 In any A.I.D. "Logframe"¹, there are important distinctions between and among goals, purpose, outputs and inputs. Descending vertically in the LogFrame hierarchy of objectives, and in simplest terms:²

- "Goals" are broadly stated objectives (usually expressed in national, sectoral terms) to which the project aspires, and toward which the project is meant to contribute although not necessarily fully accomplish;
- "Purposes" are the more proximate objectives, expected to be attained during the life of the project, with some specified means or indicators to signify the extent of attainment (that is, progress toward achievement of purpose-level objectives);³
- "Outputs" are the activities (including products and services) generated by the project with a view to achieving the project "Purposes"; and
- "Inputs" are the resources used by the project to generate the "Outputs".

¹ Within A.I.D.'s program/project management system, the "Logical Framework Matrix", or LogFrame, is meant to be a planning tool, to engage in and later record a process combining systems analysis and management-by-objectives. In any given Project, the LogFrame's legacy as a genuine planning tool and archive, or simply as a forensic device (e.g., to record in familiar terms decisions reached through some other process) must be determined by the circumstances of the case.

² A.I.D.'s Handbooks, rather than Webster's, should be our guide in interpreting the LogFrame headings. The Dictionary often equates the nouns "goal", "purpose", "objective", and "aim"; and the Dictionary definitions shift between subjective and objective uses of those words. A.I.D. Handbooks, and the LogFrame, are not tolerant of nuances.

³ Reference to "progress" in evaluations connotes, to some, accomplishment of a specific number of achievements. My search for "indicators" is not intended for an evaluation "body count." At best we should be able to have some means of responding to the TOR charge (p. 1) to provide a judgment on "the extent of progress toward achieving the project purpose". We are not asked to find out, or suggest, how much progress was expected by A.I.D. or WRI to have been achieved.

1.2 The LogFrame is meant to be a basic tool in the formal A.I.D. evaluation process, with focus upon the attainment of project "Purposes". The absence of a LogFrame, or a lack of precision in its terminology, doesn't necessarily mean that Project planning was incomplete or inept, but it does add to the challenge of an evaluation. This is the situation we face with EPM.

1.3 In the case of EPM, as noted in our Evaluation TOR ("Terms of Reference", p. 5) we do not have an up-to-date LogFrame. The original (and only) LogFrame was the 1982 version, superceded by the 1985 amended Cooperative Agreement (without formal LogFrame revision) and, then, the 1989 Project Paper Supplement (again, without LogFrame update).

1.4 Thus, the TOR tasks us with "determin[ing] the extent of progress toward achieving the project purpose and WRI program objectives, as described in [the 1989] Project Paper Supplement." Unfortunately, the "purpose" and the "program objectives" are not sufficiently clear from the PPSupp to stand on their own as benchmarks for our Evaluation.

1.5 In fact, the Project Paper "Supplement" itself does not clearly identify a project "purpose" in the LogFrame sense.⁴ Our Evaluation TOR quite helpfully states (id. at 1) that

"the purpose of the EPM project is to help strengthen the capabilities of public and private institutions in developing countries to better manage and conserve their natural resources for long-term sustainable development."

I believe the TOR has well distilled the essence of the "Supplement" into a useable EPM "purpose" narrative statement, such as is usually found in the first (from the left) column of a LogFrame. This, however, does not solve our problem. (See, also, para: 2.20, below.) The focus of an A.I.D. evaluation is not on the first column but, rather, on the second column, which, with reference to objectively verifiable indicators, posits the "conditions" that will indicate the extent to which Project "purpose" has been achieved. These indicators of attainable conditions -- the End-of-Project Status, or "EOPS" -- are absent from the PPSupp.

1.6 The absence of these benchmarks was noted at the time the PPSupp was prepared in 1988. A.I.D.'s internal review of the Project Paper Supplement surfaced a number of A.I.D./Washington

⁴ The Evaluation TOR notes (id. at 5) the departure from the typical practice of organizing the evaluation around a LogFrame. This seeming apostasy is (accurately) acknowledged to result from the reality that "the original matrix inaccurately reflects the project's objectives."

concerns about evaluation measures for the EPM Project:

- At the October 12, 1988 Review meeting, AFR/TR/ANR indicated need for the PPSupp to establish "benchmarks", and to lay out the goals and objectives;
- A PPC memo October 18 noted the absence of evaluation criteria in the design, stating "there is a need for very clear statement of objectives and indicators of success for each of the major project components."
- S&T/PO, in a November 4 memo, noted that "for a ten year project, you will need to have a comprehensive evaluation. Please revamp the PP and budget to include this, and give some indication of how the evaluation will address the 'success' of the project."

(These commentors, plus LAC (in an October 27, 1988 memo), noted that the Project had not had an evaluation since 1984,⁵ and suggested, with varying degrees of adamancy, that approval of the PPSupp be delayed until there had been an evaluation.)

1.7 Thus, the primary "purpose" of this memo (see definitions above) is to elicit team understanding and agreement on the focal points of our evaluation, that is, the End-of-Project Status ("EOPS"; see para. 1.5, above). (Our agreement on the EOPS will determine whether this is a successful memo.)

II. Evolution of "Purpose" In EPM Project Design

A. The Initial Project Design

2.1 The original (and our only) LogFrame for the EPM Project is attached. In my view, it gave little guidance on evaluable elements of the original Project; it is not surprising, then, that neither the Terms of Reference nor the Report for the mid-term evaluation (April 1984) makes reference to the LogFrame.

2.2 The 1982 Project Paper, to which the original LogFrame was annexed, does not directly talk of Project objectives in Logframe "goal" or "purpose" terms. While there are references to "purpose"

⁵ As noted below in paragraph 2.3 (and n. 8), the 1984 evaluation was undertaken approximately one year after the EPM Project had become operational. It is limited mostly to observation of activities and outputs, with little opportunity to gauge impact or results.

type objectives⁶, the Project Paper rather candidly acknowledges (see, e.g., pp.5-9) that the Project grows primarily out of USAID Mission and Regional Bureau requests for technical assistance (a) to respond to developing country bureaucratic needs in the wake of Stockholm 1972, and (b) to comply with Congressional mandates for information on environmental impact of A.I.D. development programs and projects.⁷

B. The 1984 Evaluation

2.3 A nominal⁸ "Mid-Term Evaluation" was conducted in March (and reported in April) 1984, headed by the person (Peter Freeman) who had developed the Project's initial concept paper in 1980. This evaluation was focussed essentially on the level of IIED's effort in the Project's three activity areas as established by the Cooperative Agreement:

- "Advisory services" to USAIDs and Governments, based on requests from them. The Evaluation concluded (Mid-Term Evaluation Report, p. iii) that the pattern of requests fielded by IIED evinced three principle themes, viz.:⁹

⁶ The Project Paper notes (at p. 5) the need for "indigenous capability to analyze issues and plan their own natural resources management." And it hints (*id.* at 37 and 53) at Project objectives of fostering the institutional capabilities of IIED.

⁷ The essentially responsive, "service"-oriented nature of the Project was cited (Project Paper, p. 34) as possible grounds for use of a contract modality rather than cooperative agreement or grant. A cooperative agreement was decided upon (see *id.* at 37) because of the need for flexibility in Project management as well as the as-yet imprecise understanding of where, in fact, natural resource management and planning might really lead. (See, also, n. 17, below.)

⁸ The evaluation was carried out in March 1984. The Cooperative Agreement had not gone into effect until September 1, 1982. The Project Director (Steve Berwick) did not commence work until January-February 1983. Thus, the evaluation had little more than one year's operational experience to assess.

⁹ These theme areas, derived from experience in early stages of the Project, were later elaborated into the four theme areas of the revised 1985 Cooperative Agreement. See para. 2.7, below. The original Project Paper had more broadly outlined, as "three areas of service," (i) environmental policy legislation and institutional development, (ii) natural resource management, and (iii) natural resource inventories and assessments. (PP at pp. 16-18)

- (a) design or participation in country environmental profiles
- (b) assistance to environmental PVOs
- (c) assistance in preparation of national conservation strategies

-- A "Pilot Activity" (IIED and IUCN through its Conservation for Development Center), for development (for the Asia Bureau) of a systems model for integrated analysis of multiple sectors

-- Information on and analyses of the other two activity areas, leading to diffusion and replication.

2.4 The Evaluation Report reviews (and generally complements) Project progress in meeting most of the specific activity commitments of the Cooperative Agreement. The Report reviews (in some detail) IIED's response to A.I.D. Regional Bureau and USAID Mission requests for specific technical services.¹⁰ The Evaluation recommends extension of the Project because "it is providing a valuable and needed service in a satisfactory manner, and is an important tool in the implementation of AID's environmental policy." (*id.* at vi) The basic structure for the extended Project would remain as before, with some elaboration by the Evaluation (*id.* at 49-55) on specific activities to be undertaken.

C. The 1985 Cooperative Agreement Amendment

2.5 The A.I.D.-IIED Cooperative Agreement was amended by Letter Agreement dated July 2, 1985. The Program Description under the revised Cooperative Agreement is set forth in an 11 page annex ("Attachment 2"). It is WRI's performance under this 1985 Cooperative Agreement, as amended¹¹, that we are evaluating.

2.6 The revised Cooperative Agreement tenders the following language as the Project Purpose (Att.2, unnumbered p., Section I.A):

"The purpose of this cooperative agreement...is to allow

¹⁰ The Evaluation Report notes (p. v) IIED's concern with becoming a "body shop."

¹¹ There have been 23 Cooperative Agreement amendments. These Amendments do not shed light on EOPS. In addition, the PPSupp (March 8, 1989) served as the basis for amending Project authorization to add funds and extend Project completion date to August 26, 1992; the PPSupp does refine the description of the activities. See para. 2.22, below.

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[A.I.D.] and [IIED] to respond to the growing demand from developing countries for assistance on a wide range of environmental and natural resources management problems. This arrangement will enhance IIED's existing competence and capacity to expand that organization's ongoing program while at the same time bringing such a program to bear upon specific developmental priorities of A.I.D. and the rest of the donor community."

2.7 The revised Cooperative Agreement -- essentially codifying the themes identified in the 1984 evaluation -- goes on to provide (*ibid.*) that IIED shall focus "on the following four thematic areas, which represent areas of highest importance to the A.I.D. field missions:

- "1. linking natural resource management to agricultural programs;
- "2. developing integrated planning methodologies;
- "3. supporting host country non-governmental organizations (NGOs); and
- "4. "promoting the collection and use of resource assessments and data in national sectoral policies."

2.8 The revised Cooperative Agreement next lists (*ibid.* and p. "1")¹² a number of Project activities in terms suggestive of possible Project "purposes", including the following:

- IIED will "help [USAIDs] see their programs in terms of the underlying resource base"
- IIED will use its field-based experience "in applied areas of development assistance not addressed by universities or other organizations"
- IIED will "focus the attention of outside experts on the need to develop practical solutions that can be used by project and program planners operating within the constraints of the A.I.D. system."

2.9 Thereafter, under the heading of "Goals" (*id.* at "1"), the revised Cooperative Agreement recites various attributes of proposed Project activities which also suggest possible "purpose" level indicators, including:

- "contribute to improved understandings of technical

¹² I use quotation marks because of faulty numeration in Attachment 2 of the 1985 Cooperative Agreement.

issues"

- "testing of innovative intervention techniques"
- "increased host country capacity"
- "stud[y] significant problems"
- "produce long term understandings and capabilities"
- "develop the four thematic areas and define new ones"
- "encourage replication of successes"

2.10 In the discussion of implementation of the different thematic approaches (id. at "3"- "11"), the revised Cooperative Agreement modifies description of outputs and activities with descriptors at least suggestive of impact, such as

- "meaningful" set of strategies, or "appropriate" strategy
- "provide [NGOs] with measurable objectives for evaluating their progress"
- "realistic indicators of progress"
- IIED "will educate A.I.D."
- "fulfill the need for an environmental penetration of agriculture assistance"
- "[develop] techniques to address the question of sustainability"
- "adapt the insights of complex systems modelling to the natural resource interactions implicit in development"
- "identify trends in [NRM] [that] may provide the basis for new theme areas."

2.11 The Cooperative Agreement, though, does not suggest indicators of whether a strategy is "meaningful", an insight is "adapted", or A.I.D. is "educated". Thus, whatever inspiration or guidance this menu provided to IIED and A.I.D. for Project implementation, it was not refined into the formal "EOPS" (see para. 1.5, above), which is the stuff of formal A.I.D. evaluations.

D. The 1988 EPM Work Plan

2.12 CIDE's Annual Work Plan for EPM is subject to A.I.D. approval each year, evidenced by letter of agreement from S&T/FENR. (1985

revised Cooperative Agreement, Attachment 1, Section I.3)¹³ The approved Work Plan, then, becomes part of the "terms and conditions" of the Cooperative Agreement. (See fourth paragraph, Cooperative Agreement Letter, July 26, 1985.)

2.13 The final approved Work Plan by IIED, on the eve of the IIED-NA/WRI merger and the formation of CIDE, represents something of a breakthrough in formulating "Purpose"-level objectives (with indicators) for EPM. Because of its obvious contribution to the 1989 Project Paper Supplement, and to our evaluation task, I elaborate here a bit on the 1988 Plan.

2.14 The EPM 1988 Work Plan, dated September 1987, states (88WP at p. 4) that

"IIED's goal is the improvement of human living standards in developing countries while simultaneously maintaining the ecological integrity which is the basis for sustainable development. IIED's approach to its work through EPM as well as its other programs is distinguished by the clear recognition that environmental conservation cannot be achieved at the expense of development and social equity."

IIED thus identifies its institutional goal in terms of human needs (consistent with the environment) and notes (ibid.) that the institutional goal statement "informs the goals and objectives of each of the [EPM] program areas."

2.15 While no overarching EPM goal is thereafter articulated, the several goal-type statements for the four theme areas are expressed as follows (edited here at places for conformity with LogFrames):

-- "CEP/Resource Assessment Program" (id. at 11)

"[Improved] ability of developing countries to engage in sound environmental planning and natural resources management"

-- "Sustainable Agriculture Program" (id. at 19)

"[A]gricultural development projects that can be sustained in socio-economic and ecological terms over the long-run."¹⁴

¹³ My understanding at this point is that A.I.D.'s concurrence in the Work Plan has in practice been oral or tacit, and not in writing. I'll explore further.

¹⁴ I caution the reader that this is cited here as a "goal" statement, toward which EPM is meant to contribute, but not an assertion that EPM would be directly responsible for or even

- "Integrated Planning Technology Program" (id. at 27)
 "[Improved developing country] research planning in the sectors of the environment and natural resources."
- "NGO Development Program" (id. at 33, paraphrase)
 "[Sustainable development through NGO effect on natural resource management process.]"

2.16 For three of these areas (i.e., all except the IPT), the 1988 Work Plan identifies what it terms as "objectives" and which are essential equivalents of "purpose"-level statements, and include suggestions of possible indicators of progress toward achievement of the "purposes":¹⁵

2.17 -- "CEP/Resource Assessment Program"

1. [id. at 11] "Develop improved approaches to country environmental profiling, capitalizing on the experience gained to date and specifically addressing methods and programs for supporting the implementation of strategies for the sustainable use of natural resources in the developing countries covered by the EPM Project."
2. [id. at 18] "Increase recognition and use of information from natural resource assessments, by making existing sources of information more widely available, and by documenting the usefulness of past resource assessment activities."

2.18 -- "Sustainable Agriculture Program"

1. [id. at 21] "Develop practical tests of... sustainable agriculture concepts."
2. [id. at 22] "Develop and refine practical methods and tools for the planning, analysis and management of agricultural development programs and projects."
3. [ibid.] "Adopt the techniques of Agroecosystem Analysis and Rapid Rural Appraisal to enable the next people receiving development assistance to

involved in the kinds of agricultural projects described.

¹⁵ Although the following quotations are not expressed in pure LogFramese, I have not edited them for form. The important point here is to note the substance rather than the form of what IIED proposed, and what A.I.D. accepted.

participate effectively in the process, expressing their priorities, problems and skills and enhancing their ability to experiment."

4. [ibid.] "Investigate new systems of resource use and packages of technology that promise productivity couples with sustainability, cultural acceptance, and wider distribution of benefits."
5. [id. at 23] "Develop the capacity of the Sustainable Agriculture Program to analyze the agricultural policies and practices of development assistance agencies and national governments."

2.19 -- "NGO Development Program" (id. at 35)

1. "Indigenous NRM NGOs will have increased capacity to expand, to rationalize their growth, to augment their institutional agendas with new initiatives, and to establish more effective relationships with international donors."
2. "A wider variety of approaches and tools supporting sustainable development will be adapted to and validated in field environments."
3. "Collaboration among complementary public and private efforts to establish sustainable development programs will be enhanced."
4. "The strategic premise of the Program is that through NGOs that represent the poor, successful initiatives of the type described above will produce the means by which the poor can meet and then exceed basic requirements for food, water, clothing and shelter, thus relieving, in some measure, fundamental causes for natural resource mismanagement."¹⁶

E. 1989 Project Paper Supplement

2.20 The March 8, 1989 Project Paper Supplement was both an instrument and a product of negotiations between WRI/CIDE and A.I.D./S&T/FENR. The Supplement embodies CIDE's proposal, and also serves as CIDE's approved Work Plan for 1989. Much of the language (particularly that concerned with "purpose" and "objectives" is drawn closely from the 1988 Work Plan (Section II.D, immediately

¹⁶ This last statement would more properly be LogFramed in the "goal" section, but I chose not to separate it from the first three more "purpose"-like statements as an aid to interpretation.

above). In addition to extending project funding and date (through August 26, 1992, the Project Paper Supplement amended the project

- to "refine project components and increase interaction and coordination between them"; and
- to "expand the scope of these activities to address new and emerging issues." (PPSupp at p. i)

2.21 The Project Paper Supplement also asserted, far more pointedly than before, that the Project was intended to address CIDE's ability and capacity to address natural resource management issues. (*id.* at 12) The Project as of this point seems finally to have taken on more of the trappings of a true Cooperative Agreement.¹⁷ The PPSupp continued to contain elements both of core funding and Regional/Mission buy-ins; these raise implications for CIDE's management capacity and needs, but are not directly relevant to the evaluation issues addressed by this memorandum.

2.22 The four principal themes from the 1985 revised Cooperative Agreement, as recast in the 1988 Annual Work Plan, were restated in the PPSupp with some important refinement and revision:

- Natural Resource Management Assessment and Analysis was refined (*id.* at 3-7, and 17-23) to encompass five specific elements:
 1. Country Environmental Profiles (CEP)
 2. Evaluation of Country Environmental Studies (CES)
 3. Sub-Saharan Natural Resource Sector Assessments
 4. Information Dissemination
 5. Conservation of Biological Diversity
- Natural Resources Data and Planning Technologies (nee IPT) was refined and expanded (*id.* at 7-9, 23-30) to encompass seven elements or areas of activities:
 1. Data Base Management and Country Environmental Profiles
 2. Directory of Country Environmental Studies (CES)
 3. Natural Resources Indicators for Tracking NRMS Progress
 4. Natural Resource Indicators and Country Trends Monitoring Network
 5. IPT Training Workshops

¹⁷ Coincidentally, and inadvertently, the following week, in a March 16, 1989 "Items of Interest To The Administrator" memo from S&T/EN to S&T Assistant Director N.C. Brady, CIDE was referenced as the EPM "contractor".

6. Development of FORIM
7. [Relate] World Resources Report [to A.I.D. Interests

- The NGO Support Program as described in the 1988 Work Plan (para. 2.19, above) was incorporated essentially intact (PPSupp at pp. 30-32), with some refinement (*id.* at 32) in NGO selection criteria to more directly relate the CIDE NGO program to other NRM aspects of EPM
- The Sustainable Agriculture Program was described (*id.* at 33-36) in various stages of potential development, although the PPSupp essentially addressed the need and value of such a focus in EPM without specifying how a Sustainable Agriculture element might actually fit into EPM
- An Environmental Protection Information and Policy Program was described and defined (*id.* at 36-39), for implementation through sub-grant to the Conservation Foundation, with the goal of better Third World management of environmental contamination problems; since this element was never funded, and since it did not derive out of the historical IIED/CIDE experience, I won't treat it further in this memo.

2.23 The goal of the PPSupp was stated (*id.* at 1) to be

"to strengthen the capabilities of public and private institutions in developing countries to better manage and conserve their natural resources for long-term sustainable development."

(As noted in para. 1.5, above, our Evaluation TOR refers to this this as a "purpose" statement, and I would concur.)

2.24 As in the 1988 Work Plan document, the 1989 PPSupp identified (without labeling them as such) a large number of objectives or elements within the various theme areas that could serve as purpose level indicators. These included the following:

- 2.25 (1) Natural Resource Management Assessments and Analyses (NRMAA) (PPSupp at pp. 17-23):
- "support developing country governments, NGOs, regional bureaus and Missions with design and implementation of environmental, biological diversity and natural resource assessments and analyses and strategies for implementation"
 - "[promote] a more strategic approach to

environmental planning...to improve the status of natural resource management"

- "integrate up-to-date, accurate technical information into the policy-making process"
- "understand [illuminate?] the overall potential, socio-economic, and institutional factors that constrain the development of effective environmental policies"
- "incorporate policy analysis into data compilation process in development of strategies for action"
- "make [Project NRMAA] documents more useful to decision-makers"
- "inform and educate public officials, practitioners and the public on critical issues and strategies for addressing environmental planning and management"
- "[expand] the capacity of [CIDE] to affect the course of natural resource management in key countries in the region"

2.26

(2) Natural Resources Data and Planning Technologies (id. at 23-30)

- "building institutional capabilities to more effectively manage this information"
- "improve the accessibility of CESs"
- "develop modules...that can be used by Mission to analyze and develop programs bearing upon the use of natural resources"
- "[integrate] natural resource factors...into population models linked to environmental degradation"
- "ensure that [World Resources Report] topics and issues are relevant to A.I.D.'s interests"

2.27

(3) NGO Support Program (id. at 30-33)

- "[encourage, enable] regional bureaus and missions to develop and draw upon the full potential of NGOs to contribute to the attainment of sustainable development goals"

- "encourage new partnerships between environment and development NGOs in developing countries by promoting new working relationships, better problem definition and corresponding solutions regarding how the rural poor can benefit from community-based natural resource management"
- "strengthen the capacity of selected indigenous non-governmental organizations to influence natural resource management and economic development projects and programs, particularly as they are expressed at local levels"
- "strengthen the organizational management, capabilities, technical capacity, and communications and networking processes of NGOs"
- "[through NGO selection criteria, link NGO Support work to broader EPM objectives by supporting...]
 - (a) NGOs able/willing to work with USAIDs and host governments;
 - (b) NGOs working on environment/development issues affecting poorer elements
 - (c) NGOs trying to employ innovative approaches to NRM and biological diversity issues
 - (d) NGOs which there is evident prospect of policy impact, long-term effect, replicability

2.28

(4) Sustainable Agriculture Program (id. at 33-36)

- "develop methods for implementing sustainable agriculture systems that integrate ecological principles into the development of agricultural systems"
- "assess [trade-offs between] production agriculture and ecologically sound management of the natural resource base"
- "assess equity issues associated with [macro-economic policies balancing agriculture and natural resource base"
- "strengthen links between agricultural and ecological disciplines and foster collaborative actions between the Center and the agricultural staff [at] A.I.D., especially S&T/Ag and S&T/FENR."
- "[relate A.I.D. LAC] land use [studies/plans to] sustainable agriculture"

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- "promote integration [for A.I.D./LAC] of agricultural ecology into land use capability"
- "[assist A.I.D. incorporate sustainable agriculture principles into Regional and Mission policies and programs]"

III. Suggested Purpose Level Indicators For Our Evaluation

3.1 As has been noted at several points (see para. 1.1, above), our TOR summarizes (at p.1) an important part of our task to be

"[to] determine the extent of progress toward achieving the project purpose and WRI program objectives, as described in a Project Paper Supplement issued by S&T/FENR in March 1989."

Narrowly read, this would mean that our evaluation is really meant to do no more than determine what CIDE has accomplished in the year and a half since the Project Paper Supplement. However, the TOR also makes it clear that such a narrow reading is not intended, since it states (*id.* at 5) that our evaluation "will focus on the accomplishments of EPM since its restructuring in 1985." Presumably, this examination of EPM over time (at least five years) will also enable us to comply with the TOR mandate to generate "conclusions and recommendations [to] be used in the design of a follow-on...project which will further support A.I.D.'s environmental program through the 1990's." (*ibid.*)

3.2 In any event, the Project documentation has to be parsed, and CIDE's progress and performance in the years before 1989 have to be analyzed, even to have a base from which to observe "progress" since 1989.

3.3 In light of the discussion in the earlier sections of this Memorandum, I propose that for each of the four thematic areas which we are studying, we draw principally upon the 1985 revised Cooperative Agreement, the 1988 Work Plan and the 1989 Project Amendment to articulate (in LogFrame terminology) (a) purpose level objectives of EPM, and (b) indicators of progress toward achievement of those objectives. I discuss each of these in turn in the next four paragraphs.

3.4 Natural Resource Management Assessments and Analyses

(a) Suggested "Purpose" Statement(s):

- Program: To strengthen the capabilities of

developing country¹⁸ public and private institutions in natural resource management (in the continuum from assessment/analysis, through strategy/ policy/planning and implementation)

- CIDE Institutional: To strengthen the capabilities of CIDE to attain the Theme program purpose.

(b) Progress in attainment of these Theme purposes would be demonstrated by some tangible evidence illustrative of one or more of the "purpose"-level attributes suggested by the 1985 revised Cooperative Agreement (see paras. 2.9-2.10, above), the 1988 Work Plan (see para. 2.17, above), and/or the 1989 Project Paper Supplement (see para. 2.25, above).

3.5 Natural Resource Data and Planning Technologies

(a) Suggested "Purpose" Statement(s):

- Program: To strengthen the capabilities of public and private institutions in natural resource data and planning technologies (particularly as related to NRMAA-type activities; see para 3.4, above);
- CIDE Institutional: To strengthen the capabilities of CIDE to attain the Theme's program purpose.

(b) Progress in attainment of these Theme purposes would be demonstrated by some tangible evidence illustrative of one or more of the "purpose"-level attributes suggested by the 1985 revised Cooperative Agreement (see paras. 2.9-2.10; above,) and the 1989 Project Paper Supplement (see para. 2.26, above).

3.6 NGO Support Program

(a) Suggested "Purpose" Statement(s):

- Program: To increase the opportunities for and effectiveness of non-governmental organization participation in NRMAA-type activities (see para 3.4, above);
- CIDE Institutional: To strengthen the capabilities of CIDE to attain the Theme's program purpose.

¹⁸ We may find instances where CIDE's strengthening efforts are more noticeable for external institutions (e.g., A.I.D., World Bank, international NGOs, etc.) without clear links to developing country capacities. Such activities by CIDE would no doubt be viewed as within the current "purpose" of EPM, so my language here may be a bit too strict.

(b) Progress in attainment of these Theme purposes would be demonstrated by some tangible evidence illustrative of one or more of the "purpose"-level attributes suggested by the 1985 revised Cooperative Agreement (see paras. 2.9-2.10, above), the 1988 Work Plan (see para. 2.19, above), and the 1989 Project Paper Supplement (see para. 2.27, above).

3.7 Sustainable Agriculture Program

(a) Suggested "Purpose" Statement(s):

-- Program: To increase the capabilities of developing country public and private institutions to incorporate principles and practices of sustainable agriculture into NRMAA-type activities, natural resources data and planning technologies, and NGO activities (see paras. 3.4-3.6, above).

-- CIDE Institutional: To strengthen the capabilities of CIDE to attain the Theme's program purpose.

(b) Progress in attainment of these Theme purposes would be demonstrated by some tangible evidence illustrative of one or more of the "purpose"-level attributes suggested by the 1985 revised Cooperative Agreement (see paras. 2.9-2.10, above), the 1988 Work Plan (see para. 2.18, above), and the 1989 Project Paper Supplement (see para. 2.28, above).

* * * * *

I would close this Section by emphasizing that I do not mean with these suggestions to pre-empt or subsume the full range of questions and inquiries in the TOR, as elaborated in Cynthia Jensen's "division of tasks" memo of March 23, 1991, as discussed at our several team meetings. Rather, this memo addresses the TOR task of reporting on "progress" when the tool normally used (a LogFrame, with supporting text) is unavailable to us.

IV. Application of This Exercise for the Future

4.1 Our effort to determine (albeit retroactively) workable progress indicators for EPM should contribute to the project design effort in this respect in the follow-on project.

4.2 I also suggest that our efforts in clarifying our evaluation methodology, based upon EPM's and CIDE's particular experience, may collaterally inform CIDE (and A.I.D.) on CIDE's approach to a future role (that it is currently exploring) in evaluation-related aspects of natural resources management.

Appendix 3

Listing of EPM Project Program Theme Area Activities

Listing of EPM project theme area activities

Natural Resources Management Strategies and Assessments

NGO Support Services

NGO Policy Impact Program

Natural Resource Data Management

Sustainable Agriculture

Biological Diversity

Forestry and Land Use

NATURAL RESOURCES MANAGEMENT STRATEGIES AND ASSESSMENTS

Project Summaries

- o AID's Senior Management Retreat on the Environment (FY91)
- o ENR support for AID/Indonesia (1985 - 1987)
- o Environmental Profile: Colombia (1987 - 1990)
- o Support for IUCN/National Conservation Strategies (1985 - 88)
- o CEP Support: Peru (1988), Bolivia (1986), Eastern Caribbean (1986)
- o Paraguay CEP (1984 - 1985)
- o Support for the Central American Commission on Environment and Development (CCAD) (1989 - present)
- o Urbanization and the Environment in Developing Countries (November 1989)
- o Bolivia Land Use and Environmental Studies (1985-1986)
- o Review of Country Environmental Studies (1987 - 1990)
- o Miscellaneous technical assistance missions for USAID Africa Bureau and Missions (1986 - 1988)
- o Global Climate Change Initiative (April - May 1990)
- o Phase I - Prefeasibility Study of Natural Resource Management in the Fouta Djallon Highlands of Guinea Phase II - Assessment of the Sociocultural, Economic and Natural Resources of the Kundou and Diafore Watersheds in Guinea (Phase I - June - Aug 1988 (1 month in Guinea) Phase II - Jan-Jul 1990 (6 weeks in Guinea))
- o Natural Resource Management Action Program for the Southwest of Burkina Faso (October - December 1990)
- o Preliminary Assessment of Natural Resources Conditions/Trends in Rwanda (September 1987 - July 1988)
- o NEAP Support Activities (February 1988 to present)
- o Reviewing National and Local Government Policies in Natural Resources Management (December 1990 to present)

- o **Micro (Farm-Level) NRM Framework and Indicator Review for Africa Bureau (December 1990 to present)**
- o **Bangladesh: Environment and Natural Resource Assessment (April - October 1989)**
- o **Prefeasibility Assessment for Initiating a Country Environmental Profile (CEP) for USAID Morocco (August 1989 to present)**
- o **Assessment of Possibilities for Profitable Environmental Protection in the South Pacific Region (September - November 1990)**
- o **A Survey of University Non-Profit and For Profit Organizations that Conduct Environment and Natural Resource Economic Analysis (January and February 1990)**
- o **Tenurial Policies/Natural Resources Management Project (January 1990 to present)**
- o **The Environmental Strategy for Latin America and the Caribbean (for AID's LAC Bureau) (Sept. 1990 to present (expected end: March 1991))**

Technical Advisory Services Summaries

- o **Tourism and Development in Madagascar**
- o **The Implementation of the Madagascar Environmental Action Plan: Possibilities and Constraints for Local Public Participation**

Papers/Conferences/Workshops/Outreach

- o **Land Tenure Center Review Workshop in Africa**
- o **Solidarity Canada Sahel and PACT Workshop in Quebec on Popular Participation in the Management of Natural Resources in the Sahel**
- o **NRMS PVO/NGO Buffer Zone Management Workshop in Uganda**
- o **Natural Resource Management Initiatives in Africa: A Presentation to the World Bank Africa Infrastructure Program**
- o **Public Participation in African Environmental Action Plans**
- o **Only One Earth Conference on Sustainable Development**

- o International Conference on Environment and Development
- o Meetings of the Working Party on Development Assistance and Environment
- o Colloquium on International Economics and Rural Sustainability in Developing Countries

Case Studies

- o Responding to a Wide (and Growing) Variety of Needs of the USAID Africa Bureau
- o ENR Strategy and Management Support for AID/Chile
- o Environmental/Natural Resource Strategies for Regions/Bureaus (Natural Resource Assessments) by Dan Tunstall and L. Ann Thrupp

NGO SUPPORT SERVICES

Project Summaries

- o Participatory Rural Appraisal (PRA) Handbook (April 1990)
- o From the Ground Up case studies in Latin America (1991 - 1993)
- o Production of "A Directory of Selected Environmental Education Materials" and "How to Plan an Environmental Education Program?" (Directory printed in 1988, How to Plan... printed in 1987 and reprinted in 1990)
- o Institutional Strengthening Workshop for Guatemalan NGOs (February 25 - 28, 1990)
- o Business Week -- NGO grant distribution (Fall 1990)
- o Small Grants (PWF: 10/1/88-9/30/90)
- o Participatory Rural Appraisal (PRA) Workshop in Ecuador (August 20 - 27, 1990)
- o Rapid Rural Appraisal Workshop in Washington, D.C. (April 9 - 13, 1990)
- o NGO-PVO/NRMS Project (FY88 - 90)
- o Workshop on the Management of Natural Resources in Small Farms (September 7 - 12, 1990)
- o Workshop on Environmental Impact Assessment, Bolivia (September 8 - 13, 1989)
- o Update of "The Job Seekers Guide to Opportunities in Natural Resource Management for the Developing World." (December 1986)
- o REDES Organizational Development Collaboration (Began May 1987)

Technical Assistance Summary

- o Technical Consultancy to USAID (October 5 - 22, 1987)
- o Support of grassroots participation in the TFAP in Ecuador (COMUNIDEC) (1989 - 1990)
- o LIDEMA organizational development (1986 - 1990)

Outreach/Papers/Key Participation

- o **Participatory Rural Appraisal paper presented in the AID sponsored conference on Rapid Low Cost Collection Methods, July 9-11, 1990**
- o **Facilitation of Central American Commission for Environment and Development (CCAD) Strategic Planning Meeting, May 14-16, 1990**

Case Studies

- o **Organizational Development of LIDEMA in Bolivia**
- o **The Adoption and Use of Participatory Rural Appraisal Techniques**
- o **Nongovernmental Organizations - Private Voluntary Organizations/ Natural Resources Management Support (NGO-PVO/NRMS) Project**

NGO POLICY IMPACT PROGRAM

Project Summaries

- o From the Ground Up/Policy Studies (Oct. 1990 - Sept. 1993)
- o From the Ground Up/Outreach (1989 -1993)
- o From the Ground Up/Burkina Faso (1989 - 1992)
- o From the Ground Up/Kenya (1987 - 1982)
- o From the Ground Up/Tanzania (1990 - 1992)
- o From the Ground Up/Ghana (1988 - 1992)
- o From the Ground Up/Uganda (1989 - 1991)
- o The Role of NGOs in Policy (1991 - 1993)
- o Preparation of NGO Policy Impact Proposal

Papers/Outreach/Key Participation

- o Forestry Policy Symposium/Ghana
- o InterAction/FAVDO Africa Partnership Project
- o DAC Primary Environmental Care Workshop/Italy

Technical Assistance Summaries

- o Environmental Action Plan/Ghana
- o Conference: Soil and Water Management for Sustainable Smallholder Development
- o International Development Conference, 1989

Case Studies

- o From the Ground Up Program (Africa and LAC)
- o FGU Phase II/Policies for Popular Participation

NATURAL RESOURCE DATA MANAGEMENT

Project Summaries

- o African Indicators (1989 - 91)
- o Forim for Natural Resource Information Management (FORIM) (1988 - Spring 1989)
- o Environmental Information Center: Design Study (Spring 1991)
- o Directory of Country Environmental Studies / The International Environmental and Natural Resource Assessment Information Service (INTERAISE) (1989 - 91)
- o Briefing Book for AID's Environment and Natural Resource Program (Fall 1987)
- o Annual Report to Congress on AID's Tropical Forestry and Biological Diversity Programs (Spring 1988)
- o Integrated Planning Technology (IPT): An Analysis of the Mahaweli River Basin Project in Sri Lanka (1984 - 85)
- o Integrated Planning Technology (IPT) (1985 - 89)

Technical Advisory Services - Summaries

- o National Report Guidelines for the United Nations Conference on Environment and Development: 1990-91
- o Urban Environmental Indicators: 1990-91
- o Latin American Natural Resource and Environmental Strategy: '90-91
- o GIS Experts Group: 1990-91
- o International Forum on Environmental Information for the 21st Century: 1990-91
- o Electronic Publishing: 1989-91
- o Corps of Engineers Global Database: 1989-91
- o World Bank, EPA, and AID Indicator Development: 1989-91

Papers/Conferences/Workshops/Outreach

- o WRI/EPA/AID/OECD (May 1988)

- o WRI/IUFRO/Etc. (September 1989)
- o OECD (December 1989)
- o OECD (June 1990)
- o EPA (October 1990)
- o Environment Canada (August 1989)
- o Canadian Environmental Advisory Council: Workshop on Ecologically Sustainable Development Economics (July 1990)
- o Institute for Research on Environment and Economy, University of Ottawa: Workshop on "Breaking the Barriers to Environmental Information" (March 1990)
- o WRI/EPA/ECE: Conference on the Economics of Sustainable Development (January 1990)
- o ISTI (March 1990)

SUSTAINABLE AGRICULTURE

Project Summaries

- o **Lake Buhi Agroecosystems analysis project (in the Philippines) (November 1985)**
- o **Agroecosystem management policy seminar workshop Bicol River Basin Development Program (BRBDP) (July 1986)**
- o **Agroecosystem analysis training workshops**
- o **Integration of ecological land use capability classification and agroecosystem analysis in the Philippines (December 1985)**
- o **"Gatekeeper" Studies on Sustainability Issues in Agricultural Development (1987 to present)**
- o **Rapid Rural Appraisal training/short courses (1988 - 1990)**
- o **Rapid Rural Appraisal "Notes" Publications (RRA Notes series of Papers) (June 1988 to present)**

Papers/Outreach/Public Participation

- o **Journal Articles**
- o **Book Chapters**
- o **Monographs, Books, and Booklets**
- o **Gatekeepers (Briefing Papers)**
- o **Workshop Reports**
- o **Training Manuals**

BIOLOGICAL DIVERSITY

Project Summaries

1990

1. Biodiversity Priorities Project (Nels Johnson, 1990-ongoing).
2. Paper for OECD on Suggested Donor Activities for the Conservation of Biological Diversity (Nels Johnson, 1990)
3. Colloquium on Sustainability in Primary Tropical Forest Management (Nels Johnson, 1990-ongoing).

1989

4. Community-Based Conservation of Genetic Resources Small Grants (Nels Johnson, 1989-ongoing).
 - a. SIBAT - Philippines
 - b. Gestion de Ecosistemas - Mexico
 - c. Centro de Educacion y Tecnologia - Chile
5. Evaluation Report on the USAID ANE Regional Environmental Activities Project (George Furness, 1989).
6. Biological Diversity in Asia and the Near East: Status, Trends, and Conservation. Background paper for USAID/ANE Environment and Natural Resources Strategy (Nels Johnson, 1989).

1988

7. Jamaica PARCS Project Feasibility Study (Brian Houseal/The Nature Conservancy, 1988).
8. Reports to the U.S. Congress on USAID Programs to Conserve Tropical Forests and Biological Diversity.
 - a. 1987 Report (Dan Tunstall, 1988)
 - b. 1988-89 Report (Riasa Scriabine, 1989-1990)
9. Biological Diversity and Tropical Forest Assessments.
 - a. Guatemala (Jim Nations, 1988)
 - b. Ecuador (Bruce Cabarle, 1988)
 - c. Eastern Caribbean (Nels Johnson/Kirk Talbott, 1988)
 - d. Bangladesh (Janis Alcorn/Nels Johnson, 1989)

10. Survey of U.S.-Based Efforts to Research and Conserve Biodiversity in Developing Countries.
 - a. 1987 Survey (Janet Abramovitz, 1988-1989)
 - b. 1989 Survey (Janet Abramovitz, 1990-1991)
11. Biodiversity Support Program Executive Committee Participation (Walter Arensberg/Nels Johnson, 1988-ongoing).

1987

12. U.S. Government Biodiversity Activities Database (Nels Johnson, 1987-1988).
13. Philippine Biodiversity Survey and Action Plan (Haribon Foundation/WCMC, 1987-1990).

FORESTRY AND LAND USE

Project Summaries

- o TFAP International Monitoring (1987 - present)
- o Cameroon Forest Policy Review (July 1987 - May 1988)
- o Zaire Forest Policy Review (July 1987 - May 1988)
- o Thailand Forestry Master Plan (1988 - 1990)
- o Asia-Pacific Community Forestry Workshop (Spring/Summer 1991)
- o Ecuador TFAP (1987 - present)
- o Guatemala/TFAP 1990 - 1991
- o TFAP/Central America (1990 - 1991)
- o Carbon Forestry - Grant Mediation (1987 - present)

Technical Assistance Summary

- o SPONG Technical Assistance Grant (May 1989 - March 1990)

Case Studies

- o Ecuador Tropical Forestry Action Plan (TFAP/Ecuador)
- o Zaire Forest Policy Review

Appendix 4

Center Reports Funded by EPM, Sorted by Region
(as of 5/20/91)

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Country/Region	Date	Title	Author
	91/04	Design Study for an Environmental and Natural Resources Information Center	Center for International Development and Environment
	91/03	Colloquium on Sustainability in Natural Tropical Forest Management, (Summary Report)	Johnson, Nels; Cabarle, Bruce; Mead, Dexter
	91/03	Development Assistance, Natural Forest Management, and the Future of Tropical Forests, (Draft for Discussion Only, prepared for the Colloquium on Sustainability in Natural Tropical Forest Management)	Johnson, Nels; Cabarle, Bruce; Mead, Dexter
	91/03	Investing in Biological Diversity -- U.S. Research and Conservation Efforts in Developing Countries	Abramovitz, Janet N.
	91/02	Planning in the Dark: Illuminating Natural Resources Development with a New Systems Process: the Rangelands and Wildlife Case	Berwick, Stephen; Faeth, Paul
	91/01	Voices from the Margin: Non-Governmental Organization Participation in the TFAP (FYI - NOT with EPM money)	Cort, Cheryl
	90/10	Country Environmental Studies: A Framework for Action (Theme Paper presented at the OECD Development Centre in Paris at the Conference on Environmental Management in Developing Countries, October 3-5, 1990)	Arensberg, Walter
	90/09	Whither the People? Demographic, Tenurial, and Agricultural Aspects of the Tropical Forestry Action Plan (FYI - NOT with EPM money)	Lynch, Owen J.

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Country/Region	Date	Title	Author
	90/08	Draft Paper on Suggested Activities for OECD/DAC on the Conservation of Biological Diversity	Johnson, Nels
	90/07	Urban Environmental Management in Developing Countries	LaNier, Royce; Reeve, Stephen; Young, April
	90/07	Urbanization and Environmental Quality	Bower, Blair; Hyman, Eric; White, Rodney
	90/07	Urbanization and the Environment in Developing Countries	
	90/07	Viewing Environmental Protection as Investment in Urban Infrastructure	Foster, David
	90/06	Indigenous Peoples and the Tropical Forestry Action Plan (FYI - NOT with EPM money)	Halpin, Elizabeth
	90/06	Taking Stock: The Tropical Forestry Action Plan After Five Years (FYI - NOT with EPM money)	Winterbottom, Robert
	90/04	1990 Directory of Country Environmental Studies: An Annotated Bibliography of Environmental and Natural Resource Profiles and Assessments	WRI's Center for International Development & Environment
	90/03	Environment and Natural Resources Policy Research Centers in Developing Countries: A Guide to Policy Research Centers Known to WRI Through Research Collaboration and Staff Contact	Johnson, Nels
	90/02	A Survey of University, Non-Profit, and For-Profit Organizations that Conduct Environment and Natural Resource Economic Analysis	Kelleher, Stephen
	90/	Conserving Tropical Forests and	Abramovitz, Janet

Country/Region	Date	Title	Author
		Biological Diversity: 1988-89 Report to Congress on AID's Tropical Forestry and Biological Diversity Programs	
	90/	Hazardous (Toxic) Chemicals and Wastes; A Natural Resources Issues Paper	Marcil, T.C.; Carpenter, R.A.
	89/10	A Survey of U.S.-Based Efforts to Research and Conserve Biological Diversity in Developing Countries	Abramovitz, Janet
	89/10	Good Practices for Country Environmental Studies (Note by World Resources Institute) (OECD Development Assistance Committee, Working Party on Development Assistance and the Environment) [DAC/ENV/89/3]	Note by World Resources Institute (Walter Arensberg)
	89/09	Desarrollo e Impacto Ambiental (Informe Final, Seminario-Taller, Buena Vista, Santa Cruz)	Arze; Cabarle; Sergio; Velazco; Victurine; Aguirre; et al
	89/	Environmental Impacts of Rapid Urbanization and Industrial Development: Water Resources in the Urban Context	Lurie, C.; Laredo D.
	89/	Strengthening Independent Sector Organizations Working on Natural Resource Management Issues at the Grassroots (Prepared for the A/NE Natural Resources Strategy Project).	Richards, David C.
	89/	Strengthening Non-Governmental Organizations Working on Natural Resources Management Issues at the Grassroots	Richards, D.C.
	88/06	Progress in Conserving Tropical Forests and Biological Diversity in	WRI's Center for International Development & Environment

Country/Region	Date	Title	Author
		Developing Countries (The 1987 Annual Report to Congress on the Implementation of Sections 118 and 119 of the Foreign Assistance Act, as Amended)	
	87/09	A Briefing Book on AID's Environmental and Natural Resource Program	World Resources Institute's CIDE
	87/07	User's Guide to the U.S. Government Biodiversity Activities Database	Johnson, Nels
	87/02	Everyone's Introduction to the Technical Aspects of Biodiversity and its Conservation	Johnson, Nels
	87/02	Land and Resource Evaluation for National Planning in the Tropics	Vargas, Alberto
	86/12	Assessment of Training and Technical Assistance Needs of Private Development Assistance Agencies	Fillion, Jacob
	86/11	Scope of Work and Proposed Methodology for Country Environmental Profiles	Winterbottom, Bob
	86/07	Agroecosystem Management Policy Seminar Workshop	Asian Institute of Tourism
	86/06	Contemporary Issues in Biological Diversity and Its Conservation: A Review of Recent Publications	Johnson, Nels
	86/04	Characterizing Map Similarity: Extending the Spatial Analysis Capabilities of the IIED Development Planning Model	Berry, Joseph K.
	86/01	Project: Environmental Profile of the Andean Subregion	Fundacion Natura

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Country/Region	Date	Title	Author
	85/12	Possibilities for Integration of Ecological Land Use Capability Classification and Agroecosystem Analysis Techniques	Tosi, Joseph, Jr.
	85/06	Sustainable Agriculture: An IIED Working Paper for the 7/9-10/85 Workshop	Freeman, Peter
	84/09	A Demonstration of Systems Analysis for Development Planning. Final Report...Workshop...Computer Model...large USAID project, based upon...Mahaweli Project in Sri Lanka	Chamberlin, Robert; Faeth, Paul; et al.
	84/08	Sustainable Agriculture in Development Assistance	Freeman, Peter H.
	84/06	Country Environmental Profiles: A Booklet for Producing Environmental Profiles Based on an Evaluation of Profiles Conducted Prior to 1983	Marcus, Susan
	84/05	Directory of U.S. Foundations and Private Organizations Working on Conservation and Development Issues in the Third World	Feinberg, Rita
	84/04	A Midterm Evaluation of the Environmental Planning and Management Cooperative Agreement	Freeman, Peter; Runnalls, David; Ormond, Barbara
	84/02	A Recommendation to Revise the Environmental Planning and Management Cooperative Agreement between the IIED and the USAID	DuBois, Random
	84/01	National Conservation Strategies, A Framework for Sustainable Development	IUCN/CDC
	84/01	The Country Environmental Profile: Process and Product. An Evaluation	Dickinson, Joshua C., III

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Country/Region	Date	Title	Author
		of Profiles Conducted Prior to 1983 and Recommendations for Improvement	
	83/10	The Country Environmental Profile: Process and Product	Dickinson, Joshua C., III
	83/09	An Outline for Two Environmental Law Curricula for Lawyers and Law-Related Officials of Less Developed Countries	Taubenfeld, Howard
	83/06	A Bibliography of Models Useful in Natural Resource Applications for Developing Countries	Reed, Kenneth L., et al.
	83/06	Considerations in Planning a Zoo	Joslin, Paul
		For a list of other Sustainable Agriculture articles funded under EFM, see additional list attached at the end of this list...	
Africa	91/01	African Indicators Project: Status Report and Plans	Arensberg, Walter; A. Hammon; N. Henninger; D. Bryant
Africa	88/07	Natural Resource Management Support (NRMS) Project: Final Report on Support to PVO/NGOs in Natural Resource Management in Sub-Saharan Africa	Otto, Jonathan; Talbott, Kirk; Bassan, Betsy
Africa	88/06	Report on PVO/NGO Survey for West Africa; IIED/USAID NRMS Project	Talbott, Kirk
Africa --	Cameroon	87/11 Biological Inventory and Training in Korup National Park	Weber, Bill
Africa --	Gambia	87/02 Watershed Management in the Upper Gambia River Basin	Freeman, Peter H.
Africa --	Ghana	90/12 Popular Participation in the National Environmental Action Plan in Ghana: A Preliminary Analysis of	Dorn-Adbozu, Clement; Veit, Peter G.

Country/Region		Date	Title	Author
			the Roles of Community Level Institutions	
Africa --	Ghana	90/11	Ghana National Environmental Action Plan (EAP), (Informal Technical Paper)	Dorm-Adzobu, C.
Africa --	Guinea	90/07	Observations on Farmer Practices in Two Watersheds in the Fouta Djallon (Draft)	Kelleher, Stephen
Africa --	Guinea	90/05	Natural Resources Management Assessment of Diafore and Koundou Watersheds, Fouta Djallon, Guinea	Baird, Kate; Kelleher, Stephen; William, Paula
Africa --	Guinea	88/09	Natural Resource Management in the Fouta Djallon Watershed, Guinea: A Pre-feasibility Study Conducted for USAID	Heermans, John; Williams, Paula
Africa --	Kenya	87/09	Evaluation Report on the National Environment Secretariat; Ministry of Environment & Natural Resources, Government of Kenya	Mhlanga, Liberty; Ford, Richard
Africa --	Madagascar	90/09	The Implementation of the Madagascar Environmental Action Plan: Possibilities and Constraints for Local Participation	Opsal, Knut; Talbott, Kirk
Africa --	Madagascar	88/04	Tourism Development and the Environmental Action Plan for Madagascar	McQuillan, D. Aidan
Africa --	Morocco	89/09	Preliminary WRI Draft Report on USAID Morocco CEP First Reconnaissance Mission	Talbott, Kirk; Showler, Allan
Africa -- & Cameroon	Niger, Senegal, Rwanda,	84/07	Planning for Phase II Environmental Profiles in Niger, Senegal, Rwanda and Cameroon	Major, John; Weber, William; Brace, Paul
Africa --	Rwanda	89/04	Plan d'Action Environnemental du	Opsal, Knut; Talbott, Kirk

Country/Region	Date	Title	Author
		Rwanda Composante ONG Compte Rendu de Mission Banque Mondiale/USAID	
Africa -- Rwanda	89/04	Rwanda Environmental Action Plan/NGO Component (Back to the Office Report: February 27 - March 10, 1989)	Opsal, Knut; Talbott, Kirk
Africa -- Rwanda	88/12	Natural Resources Management in Rwandan Uplands, Guidelines for AID Intervention	Huke, Susan
Africa -- Rwanda	88/11	Mission de Preparation de L'Etude sur la Strategie Nationale de L'Environnement au Rwanda et de Plan D'Action Environnemental	Winterbottom, Robert; Furst, Michael
Africa -- Rwanda	88/07	Institutional Analysis of the Natural Resources Sector in Rwanda	Hanegreefs, Paul R.
Africa -- Rwanda	88/07	Natural Resource Management Program. Project Paper Design. OAR/Rwanda	Sikkens, Roelof B.
Africa -- Rwanda	88/07	Technical Analysis: Biodiversity; Natural Resources Management Project, Rwanda	Vedder, Amy
Africa -- Rwanda	87/10	Natural Resources Management Project for USAID/Rwanda	Booth, Greg; Winterbottom, Robert
Africa -- Rwanda	86/05	Ruhengeri Water Resources Study Rwanda; WASH Field Report No. 181	Roark, Philip; Dickson, Bonneau, Jr.
Africa -- Uganda	90/12	Constraints and Opportunities for Building Local Participation in the Uganda Environmental Action Plan, (Back to Office Report)	Mallya, Fred; Talbott, Kirk
Africa -- Uganda, Guinea, Ghana, Madagascar, Rwanda	90/12	Public Participation in African Environmental Action Plans, (presented at a workshop on African NEAPs in Dublin, Ireland, December 12-14, 1990).	Talbott, Kirk

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Country/Region	Date	Title	Author
Africa -- Zaire	90/05	USAID/Zaire Global Climate Change Initiative	
Africa -- Zaire	88/10	Zaire Forest Policy Review (Draft) Summary Report	Winterbottom, Robert
ANE	90/10	Indigenous Rights, Natural Resources, and the USAID Democratic Pluralism Initiative in Asia	Lynch, Owen J.
ANE	90/01	Toward an Environmental and Natural Resources Management Strategy for ANE Countries in the 1990s	WRI's Center for International Development & Environment
ANE	89/05	Biodiversity Issues Paper for the USAID/ANE Natural Resources and Environment Strategy	Alcorn, Janis; Johnson, Nels
ANE	89/05	Program Evaluation of Biological Diversity Conservation Activities Conducted through ANE/PD/ENV Regional Environmental Activities Project	Furness, George A., Jr.
ANE	89/	Deforestation and its Implications for the Asia/Near East Region	Armstrong, A.P.; Gallegos, C.
ANE	89/	Economic Aspects of Sustainable Agriculture: A Strategy for Asia and the Near East	Barbier, Edward B.
ANE	89/	Energy Inefficiency in the Asia/Near East Region and its Environmental Implications	RCG/Hagler, Bailly, Inc.
ANE	89/	Institutional Issues in Environmental and Natural Resources Management for the Asia/Near East Region	Barber, C.V.
ANE	89/	Integrated Resources Management for Coastal Environment in the Asia Near East Region	Olson, S; Hale, L.Z.; DuBois, R.; Robadue, D.; Foer, G.

Country/Region	Date	Title	Author
ANE	89/	Integrating Gender Concerns into the Asia and Near East Environmental and Natural Resources Strategy in the 1990s	Parker, J.K.
ANE	89/	Natural Resources and the Environment in the Economies of Asia and the Near East: Growth, Structural Change, and Policy Reform	Panayotou, T.
ANE	89/	Non-Profit Assistance to the Natural Resources Sector of the Asia/Near East Region	Resch, T.M.
ANE	89/	Rural Water Supply Sanitation, and Environmental Issues in Asia and the Near East	Tavangar, J.D.
ANE	89/	Soil Loss and Watershed Degradation: Implications for the Asia and Near East Region	Bentley, W.
ANE	89/	The Use and Management of Agricultural Chemicals in the Asia and Near East Region	Higgins, M.L.; Barclay, W.W.; Pretty, J.N.
ANE	89/	Watershed Management Issues and Opportunities in Asia and Near East Countries	Mackie, C.
ANE -- Bangladesh	90/09	Bangladesh: Environment and Natural Resource Assessment (Prepared for USAID)	World Resources Institute
ANE -- Bangladesh	89/12	Bangladesh Environment and Natural Resources Assessment: Conservation of Biological Diversity in Bangladesh: Status, Trends, and Recommended Responses	Alcorn, Janis B.; Johnson, Nels
ANE -- Bangladesh	89/10	A Conceptual Framework for Sustainable Development: An Analysis of Economic and Policy	Fallon, Louise

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Country/Region	Date	Title	Author
		Factors Affecting Natural Resources Management in Bangladesh	
ANE -- Bangladesh	89/10	An Assessment of Governmental Laws and Institutions Affecting Natural Resource Management in Bangladesh	Baldwin, Malcolm Forbes
ANE -- Bangladesh	89/10	Aquatic Resources and Fisheries in Bangladesh	Fallon, Louis (w/assistance from Alan Plotkin)
ANE -- Bangladesh	89/10	Conservation of Biological Diversity in Bangladesh: Status, Trends, and Recommended Responses	Alcorn, Janis; Johnson, Nels
ANE -- Bangladesh	89/10	Environmental Issues Related to Rural Energy Use in Bangladesh	Islam, Professor M. Nurul
ANE -- Bangladesh	89/10	Pesticide Use and Environmental Pollution in Bangladesh	Showler, Allan
ANE -- Bangladesh	89/10	Rural Resource Use: Emerging Issues for Sustainable Agriculture (An Annex of the Bangladesh Environment and Natural Resource Assessment)	Mackie, Cynthia
ANE -- Bangladesh	89/10	Sustainable Development of Forest Resources in Bangladesh: Challenges and Opportunities	Winterbottom, B. (w/ Haroun er Rashid, G. Monowar Kamal)
ANE -- Bangladesh	89/10	The role of NGOs in the Sustainable Development of Natural Resources in Bangladesh	Cort, Cheryl
ANE -- Bangladesh	89/10	Urbanization and Environmental Issues	Khan, Dr. Amanat Ullah
ANE -- Bangladesh	89/07	Bangladesh Environment and Natural Resources Assessment: Environmental Planning, Impact Assessment, Aquatic Ecology, and Water Management in Bangladesh: A Background Paper	Plotkin, Alan
ANE -- Indonesia	87/08	Preparation of a Selected Annotated	Murphy, Laura

Country/Region	Date	Title	Author
		Bibliography on Natural Resources and the Environment of Indonesia	
ANE -- Indonesia	87/02	Technical Assistance for the Indonesian NGO Forest Conservation Network	Murphy, Laura
ANE -- Indonesia	85/07	Coastal Resources Management and Environmental Assessment Needs for Aquatic Resources Development in Indonesia	Burbridge, Peter W.; Maragos, James E
ANE -- Indonesia	84/03	Workplan for a Baseline Analysis of Development Resources in Indonesia	Clarkson, James D.
ANE -- Indonesia	83/09	Design of a Population and Environment Information Management System for Indonesia	Tarrant, James; Reed, Kenneth
ANE -- Indonesia	83/08	Water Quality in Indonesia	Day, Harold J.
ANE -- Indonesia	83/00	Chapter -- Suggested Information Management System at Menteri KLH	Reed, Kenneth
ANE -- Jordan	84/07	Scope of Work for a National Rangeland and Rainfed Watershed Program in the Kingdom of Jordan	Child, R. Dennis; Saunier, Richard
ANE -- Nepal	86/07	The National Conservation Strategy for Nepal, A Status Report	
ANE -- Nepal	85/12	The National Conservation Strategy for Nepal, A Status Report	
ANE -- Nepal	85/00	A Report Concerning the Preparation of a National Conservation Strategy for Nepal	Amatya, Devendra B.
ANE -- Nepal	84/01	A Proposal to Study the Ecology of Native Grasslands and Their Human Users in the Terai of Nepal	Berwick, Stephen
ANE -- Nepal	84/01	Draft Proposal for the Conduct and	Berwick, Stephen

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Country/Region	Date	Title	Author
		Application of Vegetation Ecology Studies at Chitawan, Nepal	
ANE -- Philippines	87/06	Planning for the Development of a Biological Diversity Action Plan in the Philippines	DuBois, Random
ANE -- Philippines	86/08	Buhi Agroecosystem Analysis Workshop Report (and Preliminary visit 8/85)	Conway, Gordon
ANE -- Philippines	86/01	The Agroecosystems of Buhi: Problems and Opportunities	Conway, Gordon R. and Percy E. Sajse
ANE -- Philippines	84/05	A Proposed Work Program for Phase II of the Philippine National Conservation Strategy	White, Bruce
ANE -- Sri Lanka	86/05	Workshop on Sri Lanka National Conservation Strategy	Alford, Donald
ANE -- Sri Lanka	84/06	A Preliminary Review and Analysis of the Literature on Natural Resources, Their Use and Trends in Sri Lanka	DuBois, Random
ANE -- Thailand	91/01	Towards More Effective Recognition of Tenorial Rights, Claims, and Management Capacities Among People Occupying Conservation/Protection Forests in the Kingdom of Thailand	Alcorn, Janis; Lynch, Owen
ANE -- Thailand	87/11	A Report on the Participation of Thai Non-Governmental Environment and Development Organizations in USAID's Proposed Management of Natural Resources and Environment for Sustainable Development Project	Richards, David
ANE -- Tunisia	86/11	Technical Assistance in Environmental Education to the Tunisian Institute for Appropriate Technology	Geha, Mounah

Country/Region	Date	Title	Author
ANE -- Turkey	83/12	The Environmental Problems Foundation of Turkey	Runnalls, David
Benin	86/01	Report of the Benin Forestry Assessment and Programming Mission	Winterbottom, Bob
LAC	91/04	Sustainable Forestry as a Response to Global Warming: A Central American Perspective, (A Workshop Held in Guatemala City)	Faeth, Paul; Trexler, Mark C.; Page, Diana
LAC	91/03	Environmental Strategy Options for Latin America and the Caribbean	World Resources Institute; USAID/LAC Bureau
LAC	90/11	Revisando Cuentas: Evaluacion del Plan de Accion Forestal Tropical en Centroamerica	Rodriquez, Jorge; Cabarle, Bruce
LAC	90/10	Plan de Accion Forestal para Centroamerica: Conservacion de Ecosistemas	CATIE, CCAD, WRI
LAC	90/10	Plan de Accion Forestal para Centroamerica: Desarrollo Industrial Basado en Bosques	CATIE, CCAD, WRI
LAC	90/10	Plan de Accion Forestal para Centroamerica: Foresteria en el Uso de la Tierra	CATIE, CCAD, WRI
LAC	90/10	Plan de Accion Forestal para Centroamerica: Instituciones	CATIE, CCAD, WRI
LAC	90/10	Plan de Accion Forestal para Centroamerica: Lena y Energia	CATIE, CCAD, WRI
LAC	90/09	Plan de Accion Forestal para Centroamerica: Memoria Mesa Redonda Regional	CATIE, CCAD, World Resources Institute
LAC	88/12	Biological Diversity and Tropical Forest Assessment for the Eastern Caribbean	Johnson, Nels; Talbott, Kirk; Jackson, Ivor; et al

Country/Region	Date	Title	Author
LAC	88/05	Preliminary Report. Scoping Mission to the Caribbean Conservation Association	Richards, David
LAC	88/02	Publication, Promotion and Distribution of a Regional Environmental Profile for Central America	CATIE
LAC	86/08	Natural Resources and Economic Development in Central America: A Regional Environmental Profile, EXECUTIVE SUMMARY	Leonard, H. Jeffrey
LAC	86/08	Report of the Reconnaissance Mission for the Environmental Profiles in the Eastern Caribbean Region	Winterbottom, Bob; and McCaffrey, Dennis
LAC	85/04	Proposed Environmental Procedures and Guidelines for the Central American Bank for Economic Integration	Horberry, John
LAC	85/00	Natural Resources and Economic Development in Central America: A Regional Environmental Profile, DRAFT	Leonard, H. Jeffrey
LAC -- Belize	83/08	Environmental Laws and Environmental Institutions in Belize	Brightman, Richard; Leonard, H. Jeffrey
LAC -- Belize	83/06	Coastal and Marine Sector Analysis of Belize	DuBois, Random
LAC -- Bolivia	87/03	Sugerencias Para el Desarrollo Racional de los Bosques Naturales Tropicales y Subtropicales de Bolivia	Tosi, Jr., Joseph A.
LAC -- Bolivia	86/09	Review of the Bill on the Environment and Natural Resources	Pires, Ivon
LAC -- Bolivia	85/05	Summary Review of Project	Tosi, Joseph A., Jr.

Country/Region	Date	Title	Author
		Preparations and Recommendations for Technical Advisory Services for the Implementation of a Land Use Capability Study for the Eastern Andean Slopes of Bolivia	
LAC -- Bolivia	84/11	Report on Technical Assistance in Land Use Capability for the Eastern Andean Slopes of Bolivia	Watson, Vicente
LAC -- Bolivia	84/10	Incorporation of Natural Resources Management into the USAID/Bolivia Development Program	McCaffrey, Dennis
LAC -- Bolivia	84/02	Proposal for a Detailed Land Use Capability Survey of Selected Subregions of the Eastern Andean Slopes and Piedmont of Bolivia	Tosi, Joseph, Jr.
LAC -- Chile	90/11	Environment and Natural Resources Strategy in Chile	Arensberg, Walter; Higgins; Asenjo; Ortiz; Clark
LAC -- Chile	90/08	Problemas Ambientales de Chile (Volumen I y Volumen II) (Atlas)	Hajek, Ernst R.; Gross, Patricio; Espinoza, Guillermo A.
LAC -- Colombia	90/07	Perfil Ambiental de Colombia	Pombo, Diana; et al (Published by COLCIENCIAS)
LAC -- Colombia	87/06	Scoping Report -- the Environmental Profile of Colombia	Arensberg, Walter; McCaffrey, Dennis; et al.
LAC -- Costa Rica	87/03	An Inventory of Beneficial Marine Life of Costa Rica's Atlantic Coral Reef	Robinson, Steve
LAC -- Ecuador	89/01	An Assessment of Biological Diversity and Tropical Forests for Ecuador	Cabarle, Bruce; Crespi, Muriel; et al.
LAC -- Ecuador	87/02	First Ecuadorian Congress on the Environment	Fundacion Natura

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	Country/Region	Date	Title	Author
LAC --	Ecuador	83/12	A 1983-84 Workplan for the Environmental Education Program (Phase II) of Fundacion Natura	Reyes, Marco Encalada
LAC --	Guatemala	89/06	Forestry as a Response to Global Warming: An Analysis of the Guatemala Agroforestry and Carbon Sequestration Project	Trexler, Mark C.; Faeth, Paul E.; Kramer, John Michael
LAC --	Guatemala	88/12	Biodiversity in Guatemala; Biological Diversity and Tropical Forests Assessment	Nations, James; Houseal, Brian; et al.
LAC --	Haiti	86/05	Assessment of Haiti's Indigenous Environmental Non-Governmental Organizations and Recommendations for a USAID Program to Support Them	Wood, Diane Walton; Conway, Frederic
LAC --	Haiti	84/06	Preliminary Work Plan for the Implementation of the Comprehensive Resource Inventory and Evaluation System (CRIES) Project in the Republic of Haiti	Schultink, Ger
LAC --	Honduras	86/03	Report on Consultation to the Asociacion Hondurena de Ecologia	Lansdale, Phoebe
LAC --	Honduras	83/04	Proposal for a Phase II Environmental Education Program for the Asociacion Hondurena de Ecologia	Lieberman, Gerald
LAC --	Jamaica	85/01	Phase I Report and Preliminary Phase II Workplan for Jamaica Country Environmental Profile	Field, Ralph M., Assoc. Inc.
LAC --	Jamaica	84/08	Scoping Study for Jamaica Country Environmental Profile	Field, Ralph; McCaffrey, Dennis
LAC --	Panama	86/03	Panama: At the Crossroads	Nichols, Sandra
LAC --	Panama	83/04	Draft Plan for the Development of a Private Sector Initiative in Natural	Lieberman, Gerald

Country/Region	Date	Title	Author
		Resource and Environment Programs in the Republic of Panama	
LAC -- Paraguay	85/06	Perfil Ambiental del Paraguay	IIED, Presidencia de la Republica, AID
LAC -- Paraguay	84/04	Provisional Scope of Work for the Paraguay Country Environmental Profile	McCaffrey, Dennis; Hartshorn, Gary; Wood, Diane
LAC -- Peru	85/04	Fragile Lands in Peru. Report to the Joint Fragile Lands Working Group of USAID	Painter, Michael; et al.
LAC -- Peru	84/01	The Environmental Movement in Peru	Lieberman, Gerald A.; Swift, Byron
North America	85/00	Natural Resources and Environmental Management at North American Universities, a Guide to Training Opportunities, (extractions)	Kelly, Richard
Philippines, caution: methodology-NOT simply case study	90/05	A Strategy for Arresting Tropical Deforestation Towards the Recognition and Protection of Customary Property Rights Within "Public" Forest Zones: A Methodological Framework Developed in the Republic of the Philippines	Lynch, Owen
South Pacific	90/11	Notes on Profitable Environmental Protection in the South Pacific Region	Richards, David C.
U.S.A.	84/08	A Review of Alternative Approaches for Litter Clean-Up Campaigns in the United States	Dompka, Victoria

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Appendix 5

Terms of Reference for Final Evaluation

ENVIRONMENTAL PLANNING AND MANAGEMENT PROJECT
(Project No. 936-5517)

Terms of Reference for Final Evaluation

Second Quarter, FY 1991

I. INTRODUCTION

A. Overview

The Environmental Planning and Management Project (EPM) was established by the AID Bureau for Science and Technology, Office of Forestry, Environment and Natural Resources (S&T/FENR) in 1982. The EPM project is implemented through a cooperative agreement (LAC-5517-A-00-5077-00) between S&T/FENR and the World Resources Institute (WRI), whose Center for International Development and Environment (Center) is responsible for carrying out the activities of the project. A mid-term evaluation of EPM, conducted in 1984, resulted in a restructuring of the project to emphasize four programmatic themes. The final evaluation, scheduled for the second quarter of fiscal year 1991 (January-March), will determine the extent of progress toward achieving the project purpose and WRI program objectives, as described in a Project Paper Supplement issued by S&T/FENR in March 1989. The final evaluation will also address the impact that the project has had on strengthening WRI's capacity and influencing the content and direction of AID's overall environmental program. Conclusions and recommendations from the final evaluation will be used in the design of a follow-on "EPM II" project, which will further support A.I.D.'s environmental program through the 1990's.

B. Project Description

The purpose of the EPM project is to help strengthen the capabilities of public and private institutions in developing countries to better manage and conserve their natural resources for long-term sustainable development. Working with S&T/FENR through the cooperative agreement, WRI's Center provides policy advice and technical support, and disseminates information about four main areas that underlie effective natural resource planning and management. These areas constitute the four components of the Center's EPM program:

o **Natural Resource Management Assessments and Analysis**

This program concentrates on national development planning and natural resource management, including the role of resource assessments, country environmental profiles (CEPs), and national conservation strategies (NCSs). It examines institutional, legal, political, economic, cultural, and policy aspects of natural resource management and seeks solutions at the national and local level.

o **Natural Resource Data and Planning Technologies**

The data management program examines ways to strengthen the ability of public officials, NGOs and private sector representatives in developing countries to compile, gain access to, analyze, and use data on environment and natural resources for sustainable development. One of its central objectives is to define practical indicators of environmental trends and economic growth that can be applied by decision makers to monitor the sustainability of development patterns.

o **Non-Governmental Organizations (NGO) Support**

The NGO program concentrates on the role of private, not-for-profit environment and development organizations in conservation and development activities. It seeks to enhance the role that NGOs play in development policy making and to strengthen the organizational and technical capabilities of NGOs to promote sustainable natural resource and environmental management.

o **Sustainable Agricultural Development**

The sustainable agriculture program emphasizes and promotes the integration of natural resource management and ecological principals with agricultural development. This requires explicit recognition of the social, economic and environmental trade-offs in agricultural development, and aims to balance these trade-offs by defining strategies, economic policies, analytical methods, training and participatory strategies to advance environmentally sound management of the agricultural resource base.

The Center's work is divided between the field (anywhere outside of the U.S.) and the U.S. Since the inception of the project, EPM staff have worked with AID regional bureaus, country Missions, host governments, and NGOs to improve mutual understanding of technical issues, analyze and test new problem solving approaches, and help strengthen institutions dealing with environment and development issues. In each of the

program areas, the Center works closely with local institutions to maximize host country participation and collaboration in project design and implementation.

C. Purpose of the Evaluation

EPM is AID's first and longest continuing, centrally-funded environmental support project, with more than eight years of implementation experience. The final evaluation will focus on (a) the contribution of EPM to Agency and WRI mutual interests and (b) accomplishments in strengthening developing country institutions to identify, analyze and respond effectively to current and emerging environmental issues. The evaluation also provides an opportunity to draw insights from EPM implementation to guide the design of "EPM II" and other centrally-funded projects addressing institution-building and policy issues related to natural resources and environmental management.

II. BACKGROUND

A. Project Objectives and Design

Implementation of EPM began in 1982 and will end in 1992. A fundamental premise of the project is that sustainable economic development cannot be achieved at the expense of the natural resource base, but depends on environmentally sound, socially equitable, and economically viable policies and practices for environmental and natural resources management. The design and implementation of activities funded under EPM have evolved with AID and WRI interest over the past decade in encouraging field missions and host country governments to become more aware of the link between environmental management and sustainable economic development, and to take measures to incorporate environmental issues into development planning.

The cooperative agreement mode was chosen as the project mechanism in an effort to strengthen the capability of U.S. non-profit organizations (primarily the Center) to conduct research on environmental issues and develop new tools and approaches for integrated resource management in developing countries. The S&T/FENR-funded cooperative agreement with the WRI Center provides the basis for Center to develop institutionally through EPM's core research and technical assistance activities.

Provision for buy-ins is a principal feature of the project, enabling AID central and regional bureaus and field missions to participate actively in the development of new activities while accessing the Center's expertise and resources.

B. Implementation History

During the first three years of project implementation, EPM activities concentrated on providing technical assistance upon request to identify environmental issues and report findings in the form of publications known as "Country Environmental Profiles" and "National Conservation Strategies." The reports ranged from preliminary to comprehensive assessments of problems related to natural resource depletion and environmental degradation in each country. Each included recommendations for measures to deal with issues. Other activities during this period of implementation were devoted to developing and disseminating methodologies to diagnose community-level environmental issues related to local land use and agricultural practices; training activities (e.g., workshops for AID and host country personnel); and short-term consultancies in response to AID mission requests and buy-ins, on a case-by-case basis, to address specific environmental problems relevant to project design work.

Following the recommendations of the mid-term evaluation of the project in 1984, EPM was restructured. The range of activities undertaken by the Center--then known as the International Institute for Environment and Development (IIED)--was narrowed to four thematic areas (described in Section 1.B above) central to the project's institution-building objectives. The rationale was that the sharpened focus would enable the Center and AID to concentrate on consolidating and utilizing experience and information gained from research and technical assistance activities funded under EPM.

In 1986, the project began to support biodiversity and tropical forest assessments as an integral part of broader resource assessments and analyses. The 1989 Project Paper Supplement also set the stage for launching new activities in the area of toxic and hazardous waste management, under a planned separate cooperative agreement with The Conservation Foundation. To date, this separate cooperative agreement has not been executed, although work on urban and industrial environmental issues was initiated by the Center through a buy-in from the AID Office of Housing.

Based on the 1989 Project Paper Supplement, the authorization for the EPM project was amended in order to: (1) increase the authorized centrally-funded life-of-project costs from \$6,437,000 to \$9,134,000; (2) increase the allowable buy-in ceiling from \$2,178,000 to \$5,866,000; (3) extend the authorized final year obligation from 1989 to 1991; (4) expand the project authorization completion date (PACD) from September 30, 1990 to August 26, 1992; (5) refine project components and

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increase interaction and coordination between them; and (6) expand the scope of project activities to address new and emerging issues, such as the management of hazardous and toxic substances. The central purpose of the amendment was to extend and improve upon the activities being undertaken through the Center's cooperative agreement with S&T/FENR.

III. TERMS OF REFERENCE

The final evaluation will focus on the accomplishments of EPM since its restructuring in 1985. In this context, the 1989 Project Paper Supplement will serve as the project's strategic framework, replacing the earlier Logical Framework Matrix. Accordingly, the terms of reference for the final evaluation includes a broad range of questions that reflect the present design framework of the project as the background for assessing project performance, accomplishments and future directions. Important questions to be addressed by the evaluation team have been framed and grouped as follows below.

The evaluation will depart from the typical practice of organizing an evaluation around a project's Logical Framework Matrix. Following the 1984 mid-term evaluation, the project was restructured in a way that linked project activities to four principal technical themes. Subsequent amendments of the S&T/FENR cooperative agreement with the WRI Center, as well as the 1989 Project Paper Supplement, followed and expanded on this modified project design. A revised Logical Framework Matrix for the project was, however, not developed and therefore the original matrix inaccurately reflects the project's objectives.

A. Project Impact and End-products

1. Cross-cutting questions

Overall impact: In what ways have activities contributed to host country development planning and policy formulation regarding natural resources management? Have activities helped to integrate technical information into the policy-making process through understanding non-technical (political, economic, social, institutional) constraints on policy development?

What tools have been developed by EPM to assist developing countries in environmental planning and management?

Gender issues were not explicitly included in project design as a program component. However, what insights on the role of women in natural resources management have been gained through

the project's "important stakeholder" analysis?

Knowledge: Has the project produced a general body of knowledge of its four theme areas?

- In what ways has information generated by EPM reached target audiences in host countries? How has it been used to further environmental awareness in these countries?
- Was the quality of written documents produced under EPM appropriate, i.e. of sufficient quality to meet the needs of whoever requested it, timely, and of value with respect to follow-on activities?

Have activities resulted in follow-on actions under EPM and/or beyond the project?

Has EPM generated effective collaboration among its different clients (i.e. the Center and other participating U.S. organizations; A.I.D. missions and regional bureaus; host country government agencies; host country institutions, e.g. NGOs, private sector, universities; communities); other donors? (The nature of the Center's relationship with AID will be addressed below.)

2. Theme area questions

What has been the relative effort to (1) implement activities in the four theme areas, (2) respond to mission/bureau/other requests outside of the four theme areas, and (3) provide informal advisory services outside of the context of specific activities?

To what extent has the project integrated activities in its theme areas? Should the project work towards linkage among its theme areas?

Natural Resource Management Assessments and Analyses

- Has the project contributed to the development of natural resources management plans in host countries?
- At what level were plans designed - regional, national, local? What are the relative merits of plans at these different levels?
- What has been the level and nature of participation of the various participants in the process of developing plans? How can the project increase participation in the future?

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- What happened to completed plans? Who was the audience? How effective was dissemination? Did the plans result in actions? Do plans include recommendations for how the plan could facilitate follow-on actions (i.e. do the plans plan for follow-on actions)? Were plans revisited after actions had been taken?

Natural Resource Data Management

- What progress has been made in identifying the natural resource data management needs of key international agencies, governments, donors and NGOs as they relate to A.I.D.'s environmental program?
- How has the project increased the availability of environmental data to developing countries?
- Have meaningful indicators for natural resources management and monitoring of environmental trends been developed?
- Integrated Planning Technology (IPT): How has the IPT model been used in project activities? What is its potential? The IPT method was disseminated at workshops to 650 people. What happened next, e.g. how has the methodology been used, was it disseminated further? Were the forestry and coastal models ever validated?
- What progress has been made in the development of the Forum on Natural Resources Information Management (FORNIM)?

Non-Governmental Organization (NGO) Support

- How has the project advanced the role of developing country NGOs in the environmental sector?
- What is the long-term goal of NGO support, for any individual NGO and for the program? For example, is the project supporting NGOs that it would hope to work with in the future?
- What insights have been gained about the present and potential roles of NGOs in achieving improved natural resources management objectives?

Sustainable Agriculture

- Who are the potential "action agents" for promoting more ecological and sustainable agricultural methods (e.g. governmental agriculture ministries, universities, governmental agricultural research institutions, international research institutions, extension workers -

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government, NGO, or others)? Which action agents have been the focus of project activities and at what level have activities been targetted, e.g. policy, research, extension, farm levels.

- How have activities addressed the economic, social and technical constraints to agricultural sustainability?

Other: Environmental Protection Information and Policy Reform

What happened to the intent to work with the Conservation Foundation on urban and industrial pollution issues? Should this be taken up in the future? Have other projects assumed some of the intended roles for EPM?

3. Impact of cooperative agreement mode on the Center as an institution

In what respects have the Center's institutional and technical capabilities been strengthened from implementing EPM and from the information generated by EPM activities?

How are EPM activities integrated into the Center's overall program?

What is the character of the working relationship between A.I.D. (S&T/FENR, bureaus and missions) and the Center?

Who controls the substantive direction of the project? Does A.I.D. play an appropriate role?

Is the cooperative agreement a valuable model for development assistance in the environmental sector? How can the cooperative agreement mode be improved?

What have been the advantages and disadvantages of combining the Center's EPM activities with support from private foundations and other development assistance agencies for complementary activities?

What is the long-term vision for the Center as an institution? How does the cooperative agreement help the Center to move towards fulfilling its vision?

B. Project Implementation

1. Activities

Examine the implementation aspects of the EPM project, i.e. the functional steps in the project process: activity identification or development; facilitation; implementation;

follow-on activities within and outside of the project context; evaluation. In which steps is the project engaged? How are steps linked?

Although gender issues were not an explicit program component, how were gender issues dealt with in project implementation?

What is the level and quality of mission and regional bureau involvement in EPM activities?

What insights can be gained from mission, regional bureau, S&T/FENR, and the Center staff regarding implementation constraints?

How has project work/effort been allocated over the four theme areas? What is the process by which effort is allocated?

Ongoing project evaluation and monitoring: How has the project been monitored? What measures of progress and effectiveness have been followed and by whom? Are opportunities for evaluation and rethinking of the project adequate?

2. The Center's project administration, organizational structure, and performance

Has the Center delivered appropriate technical assistance and timely services? What is the level of satisfaction among missions, bureaus and other clients?

Is the Center's management style, staffing and organizational structure appropriate for meeting EPM demands and for meeting the Center's institutional vision in the future?

Many of EPM field activities are relatively short-term, one-shot activities that may preclude longer-term institutional relationships with host country institutions. Is there a need for such longer-term relationships and experiences and how could they be achieved in the future?

Does the Center have adequate expertise in the various geographic regions? How can weak areas be strengthened?

What are the relative merits from A.I.D. and the Center's point of view of hiring additional core technical staff at the Center versus using short-term contractors for technical expertise?

How can the Center's outreach capacity, i.e. its ability to write, publish, present materials at conferences, be improved (specific to EPM activities)?

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How has the project been affected by the merger of the Center with WRI? How can the new relationship between the two institutions be used to the project's advantage in the future?

What has been the relationship between the Center and IIED/London and what is recommended for the future?

C. Lessons Learned -- Recommendations for EPM II

How has EPM contributed to the big picture, i.e.:

- promoting and improving host country environmental planning and management by governmental and nongovernmental organizations,
- improving A.I.D. environmental policies and strategies,
- increasing bureau and mission capabilities in addressing environmental issues in development planning and implementation activities, and
- increasing the technical and institutional capability of US environmental NGOs and providing a useful mechanism for collaboration between the US NGO community and A.I.D.?

Since EPM started, other projects in the Agency have addressed sustainable agriculture and biodiversity conservation. What does EPM offer that is different? Should the sustainable agriculture and biodiversity conservation programs be re-focussed?

What recommendations can be made regarding how new projects can address the role of women in natural resources management and gender-related issues in the sector? For example, in this project were gender issues effectively integrated into the overall program or should future projects include explicit program components addressing gender issues?

Are S&T/FENR subsidies to project activities (i.e. core budget funds) cost-effective and do these subsidies result in increased bureau and mission financial commitments in the environmental sector? Does EPM work as a catalyst or do subsidies work at cross-purposes to increased funding from bureaus, missions and developing country governments?

What are the lessons learned from EPM's use of the cooperative agreement mechanism and implementation experience? How can they be used to guide the design of EPM II and other centrally funded projects in addressing issues that emerged from EPM's experience?

Where should future effort, in the form of a follow-on EPM II project, be placed? How does the current focus of EPM support Agency and S&T/FENR evolving programmatic priorities in the environmental sector, (e.g. as reflected in the Environmental Initiative)? Should EPM II and other new projects be designed to fill any critical gaps?

D. Science and Technology Bureau Evaluation Requirements:
Cross-cutting Evaluation Themes

The Bureau for Science and Technology is concerned that evaluations provide pertinent guidance for other current and future projects on specific themes relevant to the bureau. The bureau is developing a data base on these cross-cutting themes for bureau-level programming purposes. These themes include (1) cost-sharing, (2) buy-ins, (3) sustainability, (4) women in development, (5) peer review of research, and (6) information collection and dissemination.

Many of these concerns are addressed in the above evaluation questions. However, because the bureau is creating a data base of evaluation recommendations, it is important that the information be structured around the specific set of evaluation questions developed by the bureau's Program Office. These questions are included as an Attachment and information from the evaluation should be presented in this format as an appendix to the Final Evaluation Report.

IV. METHODS AND PROCEDURES

These terms of reference do not call for a specific methodology to be used by the evaluation team in addressing the questions outlined in Section III above. The team will be tasked with developing an appropriate evaluative methodology during an initial week of team-building in Washington. The team will develop its approach based on an intensive review of reports and background papers provided by the WRI Center, review of key AID project documents, interviews with relevant AID staff in geographic bureaus and the S&T bureau, and a "round-table" with a select group of Center and AID Washington staff who will continue to serve as an advisory body to the team during the course of the evaluation. The team will refine its approach, including specific evaluation instrument(s), following this initial week in Washington and preceding site visits in three geographic regions.

It is expected that the team will follow an approach that is sensitive to the institutional history and vision of the WRI

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Center, the evolution of EPM program direction and activities since the mid-term evaluation in 1984, the form and substance of S&T/FENR project oversight and management, the scope and development impact of EPM buy-in activities implemented in cooperation with AID regional bureaus and Missions overseas, and the relevance of "lessons learned" to the design of an EPM II follow-on project to be authorized in FY 1992.

The following general tasks will be incorporated into the team approach:

- A. Review of Reports and Documents: Documentation relating to the Center's EPM program, the AID centrally-funded EPM project, and specific buy-in activities will be reviewed to ascertain the quality, substance, and relevance of services being rendered.

The evaluation team will have access to the following reports and documents as preparatory information:

1. EPM Project Paper
2. Cooperative agreement(s) with the WRI Center
3. 1984 mid-term evaluation report
4. 1989 Project Paper Supplement
5. WRI Center annual work plans
6. WRI Center monthly reports
7. WRI Center EPM program review paper (prepared specifically as input to the final evaluation)
8. WRI Center publications generated by the EPM program
9. S&T/FENR Project Manager's implementation file.

- B. Interviews: The team will interview WRI Center staff, EPM contractors, S&T/FENR project management staff, AID geographic bureau and other central bureau personnel, USAID Mission staff (on site visits), and cooperating country officials and non-governmental representatives (on site visits) to assess their participation, contribution, and insights concerning both process and impact of EPM project activities. Interviews will also be conducted with key informants from other U.S. non-governmental organizations, other USG agencies, and other donors to obtain their perspective of the EPM project's contributions towards building policies and institutions for sustainable development.

- C. Visits to USAID Missions and Cooperating Country Institutions: At least one country in each of three geographic regions (Africa, Latin America, Asia) where the EPM project has supported activities will be selected for site visits by the evaluation team. Selection of countries will be determined prior to the initial team-building week

in Washington, and will be based on evidence of continuity of EPM project support and integration of EPM program themes in strengthening host country institutions (government agencies and non-governmental organizations) to foster environmentally sound development planning and policies. In each of the three country cases, review of key documentation and interviews with principal informants will provide essential information on process, impact and future implications of EPM-funded interventions.

V. SCHEDULE

It is estimated that this evaluation will require up to seven weeks of work by the Team Leader and up to six weeks of work by other team members. One and a half weeks will be devoted to preparation and interviews in Washington, three weeks will be allocated for subsequent refinement of evaluation methods and field visits to three countries, and one and a half weeks will be devoted to drafting of the final report in Washington. The team leader will require an additional one half week prior to team commencement to prepare for the evaluation and one half week at the end of the evaluation for wrapping-up. Approximate times in the evaluation itinerary do not include travel, holidays or Sundays. The evaluation team is expected to work six days a week.

The schedule outlined below is illustrative. A detailed schedule, including lists of people to be interviewed, will be developed by the S&T/FENR Project Manager in consultation with the EPM Program Director and staff at WRI, and finalized one month prior to the initiation of the evaluation. The evaluation is anticipated to commence in early March 1991.

A. Initial Preparation in Washington, D.C. - One and one-half weeks (9 days)

1. Review project documentation (AID and WRI will make available sets of all salient reports, documents and publications).
2. Presentation by the Center's project staff on project implementation, progress and recommendations regarding evaluation methodology.
3. Develop team approach and evaluation methodology.
4. Interviews with WRI and AID staff, and others as appropriate.

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5. Roundtable with WRI/AID to refine the evaluation approach and finalize the evaluation plan and schedule.
- B. First Field Visit--Case Study Country(ies) in Latin America - One week (6 days)
1. Interviews with AID Mission staff.
 2. Interviews with cooperating country representatives.
 3. Site visits (if necessary).
 4. Report preparation.
- C. Second Field Visit--Case Study Country(ies) in Africa and in Asia - Two weeks (12 days)
1. Interviews with AID Mission staff.
 2. Interviews with cooperating country representatives.
 3. Site visits (if necessary)
 4. Report preparation.
- D. Evaluation Report Preparation in Washington, D.C. - One week (6 days)
1. Discussion with the Center's project staff of findings from field visits.
 2. Additional interviews with key AID, WRI and other informants.
 3. Preparation and synthesis of individual reports to develop preliminary evaluation report.
 4. Roundtable with AID/WRI to discuss preliminary evaluation findings/recommendations and to focus on implications for redesign of EPM II.
- E. Report Finalization and Debriefings - One-half week (3 days)
1. Team leader integrates contributions.
 2. Team leader submits final report.
 3. Team leader arranges formal debriefing for AID, WRI and other invited participants at date to be determined.

It is anticipated that the six-week evaluation effort will be phased over the March - May period to accommodate availabilities of team members. If availabilities permit, the evaluation will be concentrated in a shorter time period. The specific timing for each stage of the evaluation--preparation in Washington, field visits to three or more countries, preparation of the final report--will be determined prior to initiation of work in early March.

VI. EVALUATION TEAM COMPOSITION

In order to ensure a balance of expertise that covers the major program themes of the EPM project, the team should represent the following technical areas:

- A. Senior Resource Planning and Policy Specialist (Team Leader): The Team Leader should have in-depth experience with development assistance programs designed to promote integrated natural resources management. Administrative experience and proven capability in leading interdisciplinary teams is essential. The Team Leader will be responsible for integrating the contributions of individual team members into a final evaluation report.
- B. Social Science Analyst/Institutional Specialist: This team member should have strong skills and work experience in assessing institution-building components of development projects and in analyzing social, political and economic factors in policy-related issues in the environmental and natural resources management.
- C. Ecologist/Environmental Analyst: This team member should have extensive knowledge of critical environmental issues in development planning and field experience in designing, implementing and evaluating technical aspects of development programs that address natural resources issues.
- D. AID Representative: S&T/FENR will arrange for the participation of an AID representative with broad experience with A.I.D. programs, policies and operations. The AID member will be at no cost to the contractor.

It is essential that team members possess broad work experience in at least one of the three geographic regions--Africa, Latin America, Asia--where EPM activities have been implemented. Every effort will be made to assemble a team that embodies such experience across all geographic regions. At least one team member must be fluent in Spanish.

Final selection of evaluation team members will be subject to joint approval by the S&T/FENR Project Manager and the WRI Director for EPM.

VII. REPORTING REQUIREMENTS

The format of the Final Evaluation Report will follow A.I.D. guidelines established in "The Supplement of Chapter 12 of A.I.D. Handbook 3" and will include:

- o Executive Summary
- o Project Identification Data Sheet
- o Table of Contents
- o Body of the Report
- o Appendixes

The executive summary states the development objectives of the activity evaluated; purpose of the evaluation; study method; findings, conclusions, and recommendations; and lessons learned about the design and implementation of this type of development activity (see Attachment ___ for more detailed instructions).

The body of the report should include discussion of (1) the purpose and study questions of the evaluation; (2) the economic, political, and social context of the project; (3) team composition and study methods--one page maximum; (4) evidence/findings of the study concerning the evaluation questions; (5) conclusions drawn from the findings, stated in succinct language; and (6) recommendations based on the study findings and conclusions, stated as recommendations for the design of EPM-II and other new projects under development.

For this evaluation of the EPM project the body of the report should be limited to 40 pages, with more detailed discussions of methodological or technical issues placed in appendixes.

Appendices should include a copy of the evaluation scope of work, terms of reference, a list of documents consulted and individuals and agencies/organizations contacted, and answers to the Science and Technology Bureau evaluation questions. Additional appendixes may include a brief discussion of study methodology and technical topics if necessary.

In addition to the final evaluation report the team will also be responsible for preparing the abstract and summary of the A.I.D. Evaluation Summary Form.

It will be the responsibility of the Team Leader to (1) delegate writing assignments and determine the date(s) for submission of draft reports by individual team members; (2)

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integrate individual contributions into a final revised evaluation report; (3) complete the abstract and narrative sections of the AID Evaluation Summary form; and (5) arrange debriefings by the evaluation team or team leader with AID, WRI and invited participants.

Attachment

S&T Cross-Cutting Evaluation Themes

1. Cost-sharing. S&T projects are rarely financed by S&T alone. We frequently depend on the financial and substantive participation of other parts of AID through buy-ins (which are the subject of topic 2). S&T also usually assumes participation of other non-A.I.D. organizations, which we call cost-sharing. In the context of evaluation, we need to examine this "non-A.I.D." participation. Cost-sharing is an important factor which contributes to project success. We should logically encourage cost-sharing as a means of mobilizing resources for our project objectives.
 - Is cost-sharing considered a part of the original project design? If not, should it have been?
 - Do project implementation instruments reflect requirements for cost-sharing? Did cost-sharing from the contractor, grantee or project participants have an effect, positive or negative, on the project?
 - Have outside parties provided resources for the project? Can we assess the efficacy and impact of this contribution if any?

2. Buy-ins. For many S&T projects, a substantial amount of a project's financing comes through buy-ins. We can conservatively estimate that the total buy-in contribution to S&T projects is in excess of \$300 million. The use of this mechanism to support a major part of S&T efforts is becoming institutionalized and consequently essential to our oversight and accountability function.
 - Is there a buy-in component under the project? If yes, is that buy-in component described in project design? Is there a process for tracking activities financed through the buy-ins? Are there mechanisms in place to measure the substantive effects of buy-ins?
 - Have the buy-ins made a positive contribution to the project? Have the buy-ins complemented the S&T-funded portion of the project and enhanced the overall effect of the project?
 - Has the project changed its focus as a result of the buy-ins? Have project objectives changed to incorporate the buy-ins? Is achievement of the project's original objectives dependent or independent of the buy-ins? In what way?

- What are the attributes of buy-in experiences which have worked well, e.g., attributes of success? Similarly, what has not worked well?
- 3. Sustainability. Institutionalization of S&T-supported interventions is critical to longer-term sustainability.
- How is sustainability addressed by our project? Is sustainability addressed directly in project design? Is capacity building a part of the project? Is there verifiable progress on institutionalization from project efforts to date?
- Does the project take into account the financial and institutional requirements to continue operation of the project activities after A.I.D. funding is terminated?
- Can we assess the extent to which the project target audience is motivated to ensure long term sustainability?
- 4. Women in Development. Gender considerations are implicit in most A.I.D. projects. Agency policy is to emphasize and support the active participation and substantive contributions of women in the development process. As a result, project designs have been considerably improved in respect to language application and use. However, this has created a need for oversight of gender-related effects and issues.
- Were gender issues discussed in the PP?
- Were gender issues taken into account during project implementation?
- Can project impact be disaggregated by gender? Do project data reflect gender considerations?
- 5. Peer Review. All projects having a cumulative cost over \$100,000 for research must have a peer review plan as part of the PP. For projects having a research component costing less than \$100,000 the Office Director may determine if peer review is needed.
- If research is a major part of the project, does it have a peer review plan?
- What is the extent of peer review under the project as implemented to date? Are peer review mechanisms documented? Has practice followed the agreed approach? Have peer review mechanisms met, in substance, the Bureau and Agency objective set forth in the guidance?

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6. Information Collection and Dissemination. Dissemination of findings should be an important part of S&T projects. Project components addressing information collection and dissemination are often critical to project success.

- Are the collection and dissemination of information identifiable components of the project? Were these components planned in the PP?
- Does the project support a reference library or "data base"? What are the project's mechanisms for dissemination? Are project data being disseminated?
- Has the project had an ascertained effect attributed to dissemination?

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Appendix 6

EPM Evaluation Field Visit Reports:

1. Rwanda
2. Ghana
3. Kenya
4. Nepal
5. Thailand
6. Honduras
7. Guatemala
8. Bolivia
9. Chile

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EPM Evaluation Field Visit Reports

1. **Rwanda**
2. **Ghana**
3. **Kenya**
4. **Nepal**
5. **Thailand**
6. **Honduras**
7. **Guatemala**
8. **Bolivia**
9. **Chile**

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MEMORANDUM

TO: USAID/Rwanda

FROM: Final Evaluation Team, S&T/FENR Environmental Planning and Management Project (936-5517)

S&T/FENR, Cynthia Jensen, AAAS Fellow
John Rigby, External consultant

SUBJECT: Site visit to Rwanda by Final Evaluation Team

DATE: April 26, 1991

Evaluation and site visit purpose: Two members of the final evaluation team for the S&T/FENR Environmental Planning and Management (EPM) project visited Rwanda April 16-19, 1991. This project is implemented through a cooperative agreement with the World Resources Institute's Center for International Development and Environment (CIDE, formerly the International Institute for Environment and Development). At our USAID oral debriefing April 18, we presented a short written description of the EPM project and of the final evaluation team members.

The purpose of our visit to Rwanda was to examine EPM activities, achievements and impact through discussions with the people and organizations that implemented the activities and through review of relevant documents. Conclusions and recommendations from the evaluation will help capture what we have learned during the life of the project and help guide the design of a follow-on, EPM II, project.

EPM activities in Rwanda: Rwanda was chosen as one of three African countries to visit (the others being Ghana and Kenya) because CIDE has been involved over an extensive period of time, and there has been a full range of EPM activities as well as non-EPM work. In addition, there is currently available in Rwanda a large number of persons directly familiar with CIDE's past and present work. The visit to Rwanda has enabled the evaluation team to interact directly with Bob Winterbottom, whose extensive involvement with and knowledge of CIDE and EPM over the years enabled him to contribute to evaluation tasks beyond the Rwanda experience.

The EPM activities in Rwanda since 1985 include:

1. Resources profile (1986, technical assistance) and Phase I evaluation of the Ruhengeri Resources Assessment and Management Project.
2. Preliminary project identification mission (1987) for USAID/Rwanda for the Natural Resources Management Project (NMRP). This activity included Mission-based

roundtable seminar (with GOR, USAID, and other institutions) to review nature of natural resource problems and issues being and intended to be addressed by USAID.

3. Technical analyses for NRMP Project Paper (1987-1988), including biodiversity, wetland management and aquaculture, guidelines for uplands area interventions, institutional analysis of the natural resources sector in Rwanda, and the PP economic analysis.
4. Development and preparation of the National Environmental Action Plan in collaboration with the GOR, the World Bank, and others. This activity has run from 1987 (EPM involvement since 1988) to the present with both core EPM funding and USAID/Rwanda and regional bureau buy-ins, and aspects of the EAP activity (particularly advisory services to the Government) have been incorporated into the Natural Resources Management Project. CIDE activities supported by EPM included surveys of relevant issues and participating institutions, particularly NGOs (whose incorporation into the EAP process was largely through CIDE). With funding from IDA and the Norwegian Trust Fund, CIDE administered GOR relations with expatriate technical advisors in the EAP process. CIDE personnel, in association with World Bank staff and consultants, assisted the GOR in assembling and editing basic EAP documents.
5. Growing out of NGO survey work through the EAP, CIDE (in 1990) incorporated Rwanda into the Africa-wide "From the Ground Up" program of case studies (action research) on effective local community initiatives in natural resources management. EPM funding was highly leveraged with U.S. foundation funding (Pew Charitable Trusts).

Evaluation team activities in Rwanda: The final evaluation team met with the following people and organizations:

1. USAID/Rwanda -- the team met with Jim Graham, Mission Director, and Paul Crawford, ADO.
2. USAID project personnel:
 - a. Bob Winterbottom, Environmental Advisor, Ministry of Planning, USAID/Rwanda/NRMP
 - b. Glen Smucker, Project Manager, USAID/Rwanda/NRMP
 - c. Delane Walsh, USAID/Rwanda/SARFA
 - d. Paul Hanegreefs, USAID/Rwanda/SARFA
 - e. Julia Morris, S&T/FENR/FSP
 - f. Mary Scott, Research Triangle Institute, Rapid III

3. Government of Rwanda -- Andre Rwamakuba, Director, Project on Environment and Development, Ministry of Planning (focal point for Government development of the EAP) .
4. Non-Governmental Organizations:
 - a. Juvenal Turatsinze, Association Rwandaise pour la Promotion du Developpement Integre (ARDI)
 - b. Dr. Joseph Kajyibwami, Executive Secretary, Association de Recherche et d'Appui en Amenagement du Territoire (ARAMET)
 - c. Anicet Kayigema, Association de Recherche et d'Appui en Amenagement du Territoire.
5. World Bank -- Emmanuel Akpa, Resident Representative.

Principal findings:

1. WRI has had an extensive involvement, with continuity, in the EAP process. (The final evaluation team got ample confirmation that EAP is a process and not just a product.)
2. A major and valuable contribution of CIDE has been scoping potential stakeholders and issues, and assisting in their inclusion in the EAP process. This has been particularly significant in CIDE's role in engaging NGOs in the EAP process. The NGO participation is still in early stages (and there is some NGO expression that they were invited into the process somewhat belatedly by the GOR, and more to communicate GOR intentions to the community than to represent community interest in informing the GOR planning). However, indications are good that the NGO involvement in the EAP will inject substantial elements of pluralism into natural resources management process in Rwanda.
3. The Rwanda EAP is not aimed just at natural resources or environmental projects as such but at the natural resources implications of the full range of development plans and projects. The action orientation of the Rwanda EAP is meant to bring the EAP's findings and issues to the development decision tables (Government, donors). In its initial iterations, however, the EAP is very heavily influenced by and reflective of the external funding process. (Thus, the time table of the formal acceptance of the EAP is in part driven by donor round table meetings and agendas.)
4. There has been a very high degree of localization of the technical inputs into the EAP. Recent housing of

EAP in MiniPlan bodes well for its acceptance as a trans-Ministerial plan of action. The EAP secretariat functions are essentially fully staffed and funded for administrative and management costs.

5. The relative flexibility of the EPM cooperative agreement has been positive in terms of providing CIDE with flexibility in combining central funding with mission or regional bureau buy-ins.
6. CIDE performance in Rwanda has been timely and strategically important, characterized by a facilitative role aimed at identifying and involving significant stakeholders, and particularly drawing in the relatively "invisible" stakeholders among the poor and powerless.
7. All major EPM users in Rwanda -- GOR, NGOs, USAID, World Bank -- have expressed strong interest in a continuing role by CIDE in natural resources management.

MEMORANDUM (Revised)

TO: USAID/Ghana

FROM: Final Evaluation Team, S&T/FENR Environmental Planning
and Management Project (936-5517)

S&T/FENR, Cynthia Jensen, AAAS Fellow
John Rigby, External consultant

SUBJECT: Site visit to Ghana by Final Evaluation Team

DATE: April 27, 1991

Evaluation and site visit purpose: Two members of the final evaluation team for the S&T/FENR Environmental Planning and Management (EPM) project visited Ghana April 20-24, 1991. This project is implemented through a cooperative agreement with the World Resources Institute's (WRI) Center for International Development and Environment (CIDE, formerly the International Institute for Environment and Development). (Attached is a short description of the EPM project and the final evaluation team members.)

The purpose of our visit was to examine EPM activities, achievements and impact through discussions with the people and organizations that implemented the activities and through review of relevant documents. Conclusions and recommendations from the evaluation will help capture what we have learned during the life of the project and help guide the design of a follow-on, EPM II, project.

EPM activities in Ghana: Ghana was chosen as one of two African countries to visit, because EPM has had a series of activities here since 1988 relating to support of NGO leadership in community-based natural resources management. (Attached are short summaries of the EPM activities in Ghana.) These activities include:

1. Collaboration with the Environmental Protection Council (EPC) on the preparation of case studies of successful community-based natural resources management efforts under the "From the Ground Up" program. (Attached is the 1990 final report of the program. Note that the program itself is funded by Pew Charitable Trusts, but that CIDE and its staff are funded by EPM.)
2. Assistance to the EPC on the participation of NGOs in the development and implementation of the Environmental Action Plan (EAP) through a national survey of village-based institutions and an analysis of their potential for involvement in the implementation of the EAP. (Attached is a copy of the survey report.)

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3. Assistance to the Forestry Commission on the participation of NGOs in its Forestry Policy Symposium in April 1989 and presentation of a paper on early experiences with Tropical Forestry Action Plans and Forestry Sector Reviews. CIDE (and WRI) staff in Washington provided comments and recommendations to the Forestry Commission on the draft Revised Forestry Policy now pending for final GOR approval.

Evaluation team activities in Ghana: The final evaluation team met with the following people and organizations:

1. Environmental Protection Council (EPC) -- The team met three times with the EPC to discuss the From the Ground Up case studies, NGO participation in the EAP, and the current status of the EAP. We met with:
 - a. Professor Clement Dorm-Adzobu, Director of Programs
 - b. A.A. Amoah, Principal Assistant Secretary
 - c. Angelina Kutin-Mensah, Assistant Public Relations Officer
 - d. Aboullah Iddrisu, Program Officer, Development Planning Division
2. Ghana Association of Private Voluntary Organizations in Development (GAPVOD) -- The team met with GAPVOD, a coalition of Ghanaian NGOs, to learn about the NGO community in Ghana and its involvement in the natural resources sector. We met with:
 - a. T.K. Ollennu, Executive Secretary, GAPVOD
 - b. Dr. E.O. Laryea, Chairman, GAPVOD, and Project Director, Mayday Rural Project
 - c. A.J. Annorbah-Sarpei, Technical Advisor, GAPVOD, and Executive Chairman, Center for Community Studies, Action and Development
 - d. Kate Parkes, Treasurer, GAPVOD, National General Secretary of YWCA of Ghana, and Convener, WID-GAPVOD
3. Forestry Commission -- The team met with Francesca Ocran, Secretary to the Commission, to discuss the Commission's draft Revised Forestry Policy, its involvement in the EAP, and CIDE's assistance to the Commission.
4. Center for Community Studies, Action and Development (CENCOSAD), Mallam Village -- The team met with Mr. Sarpei and visited his field site at Gbawe Village. We discussed his experiences and views on effective community approaches to natural resources management, especially participatory research and development approaches.

5. USAID/Ghana -- Peter Weisel, Bob Wuertz, Kim Hom

4. Principal findings:

1. The EPM project and CIDE has had a selective but effective involvement in Ghana, primarily through the EPC. Assistance has been highly focussed and collaborative in nature.
2. The final evaluation team was impressed with Professor Dorm-Adzobu's leadership, broad knowlege, working skills and strategic instincts. Based on this first-hand experience, combined with input from others who have worked with him, the team would recommend continued collaboration with the EPC.
3. The primary impact of the case studies can be seen in the extent to which they guide and continue to guide EPC's efforts to promote community-based natural resources management and public awareness of environmental issues.
4. Through discussions with the EPC and GAPVOD and from the conclusions of the survey of village-based institutions, it appears that Ghana has a strong community of national and local institutions engaged in promoting new approaches to natural resources management.
5. EPM collaborators in Ghana (EPC, GAPVOD, Forestry Commission) perceive that EPM can:
 - a. play a catalyst role
 - b. offer documentation skills to get the Ghana experience out to a wider community
 - c. offer access to information unavailable in Ghana
 - d. assist in pursuing external (non-EPM) funding.

Next steps for EPM: CIDE is currently collaborating with the EPC on developing activities in Ghana under the From the Ground Up - Phase II (policy studies) program.

Attachments:

1. EPM project description and final evaluation purpose
2. Final evaluation team members, description
3. Summaries of EPM activities in Ghana: From the Ground Up case studies, NGO survey for the EAP, EAP in general, Forest Policy Symposium
4. From the Ground Up 1990 Annual Report
5. Report of survey of village-based institutions

MEMORANDUM

TO: USAID/Kenya

FROM: Final Evaluation Team, S&T/FENR Environmental Planning and Management Project (936-5517)

S&T/FENR, Cynthia Jensen, AAAS Fellow
John Rigby, External consultant

SUBJECT: Site visit to Kenya by Final Evaluation Team

DATE: April 30, 1991

Evaluation and site visit purpose: Two members of the final evaluation team for the S&T/FENR Environmental Planning and Management (EPM) project visited Kenya April 25 and 29-30, 1991. This project is implemented through a cooperative agreement with the World Resources Institute's (WRI) Center for International Development and Environment (CIDE, formerly the International Institute for Environment and Development). (A short description of the EPM project and the final evaluation team members was left with USAID/Kenya during a meeting with ADO Jim Dunn April 29.)

The purpose of our visit was to examine EPM activities (since the mid-term evaluation in 1985), achievements and impact through discussions with the people and organizations that implemented the activities and through review of relevant documents. Conclusions and recommendations from the evaluation will help capture what we have learned during the life of the project and help guide the design of a follow-on, EPM II, project.

EPM activities in Kenya: Kenya was chosen as one of three African countries to visit, because EPM has had a series of activities relating to support of NGO leadership in community-based natural resources management.

1. Evaluation of the National Environmental Secretariat (NES) of the Government of Kenya (1987) by Clark Univ.
2. Collaboration with NES and Clark University in development and publication of the Participatory Rural Appraisal Handbook (1989-1990), based on illustrative cases from Kenya.
3. Survey (1988) of East African NGOs to determine technical assistance needs as part of the design of the A.I.D. centrally funded NRMS Project.
4. Co-sponsor of June 1991 Conference (1989) on the Environment and the Poor -- Soil and Water Management for Sustainable Development.

5. Preparation of three case studies under the From the Ground Up program (note that this program is extensively funded by sources other than EPM, such as the Ford Foundation) in collaboration with Clark University and NES. Collaboration with the African Centre for Technology Studies to publish and distribute the series of case studies (16 are in preparation) under the From the Ground Up program. The first two case studies were published in Feb 1991.

Evaluation team activities in Kenya: The final evaluation team met with the following people and organizations:

- USAID: Jim Gingerich, ADO
Jim Dunn, ADO
- REDSO: Richard Pelleck, Regional Advisor, Natural Resources/Policy
- NES: Elizabeth Oduor-Noah
- ACTS: Anthony Kifworo, Publications
Patrick Karani, Technology and Environment Program
Alison Field-Juma, Initiatives, Ltd. (ACTS' publishing partner)
- Other: F. Ahmed, World Bank Agric office
Steve Berwick, DAI (formerly IIED-NA)

4. Principal findings:

Listed below are the preliminary summary findings of the evaluation team that may be of relevance to the mission. The team regards these findings as data that will contribute to conclusions and recommendations for the final evaluation report.

1. EPM support in Kenya (through collaboration with CIDE, Clark Univ., NES and USAID/Kenya) has resulted in the development of participatory rural appraisal (PRA) as an effective technique to engage local communities in planning and management of their natural resources. PRA development (as a modification of rapid rural appraisal) in Kenya has benefitted other African countries where PRA is being introduced, e.g. Rwanda, Ghana, Uganda. The role of EPM/CIDE appears to have been strategically important although somewhat invisible.
2. The PRA technique is being adopted as a tool both within and beyond natural resources management uses in Kenya, for example, by UNICEF-Kenya, Action-Aid, CARE-Kenya and in several programs, such as the Village

Pilot Programs of the Cairo Action Plan and the revised District Environmental Assessment project. Adoption has been promoted through two training workshops (1989, 1990, another planned for 1991), attended by government agencies and NGOs, and through the network of individuals who at one time have been associated with NES, e.g. Francis Lelo at Egerton Univ and Charity Kabutha at UNICEF-Kenya.

3. The From the Ground Up case studies are just now being published as a series. The recommendations and policy implications of these studies need to be disseminated as published reports and at workshops and seminars in order to meet their objective of promoting policy changes that favor support to community-based natural resources management. To this end, the upcoming conference on the Environment and the Poor in June 1991 will feature the case studies.
4. EPM/CIDE work in Kenya, in contrast with other African countries visited by the evaluation team, is independent of an overarching environmental action plan or other national plan for natural resources management. The policy focus of CIDE work in Kenya is addressed more to district and sub-location levels.
5. EPM/CIDE has had productive collaborative relationships with NES, Clark Univ. and ACTS. Apart from effectively implementing project activities, these collaborative relationships have had some element of institution-building for NES and ACTS. However, NES appears to be losing its institutional effectiveness due to its relationship within the GOK structure.

MEMORANDUM

TO: USAID/Nepal

FROM: Final Evaluation Team, S&T/FENR Environmental Planning and Management Project (936-5517)

S&T/FENR, Cynthia Jensen, AAAS Fellow
John Rigby, External consultant

SUBJECT: Site visit to Nepal by Final Evaluation Team
May 2-6, 1991

DATE: May 7, 1991

Evaluation and site visit purpose: Two members (Dr. Cynthia Jensen and Mr. John Rigby) of the final evaluation team for the S&T/FENR Environmental Planning and Management (EPM) project visited Nepal May 2-6, 1991.

This project is implemented through a cooperative agreement with the World Resources Institute's (WRI) Center for International Development and Environment (CIDE, formerly the International Institute for Environment and Development-North America). A short description of the EPM project and the final evaluation team members has been left with Tobey Pierce.

The purpose of our visit was to examine EPM activities (since the mid-term evaluation in 1985), achievements and impact through discussions with the people and organizations that implemented the activities and through review of relevant documents. Conclusions and recommendations from the evaluation will help capture what we have learned during the life of the project and help guide the design of a follow-on, EPM II, project.

EPM activities in Nepal: The EPM project provided early assistance to the International Union for the Conservation of Nature and Natural Resources (IUCN) in 1985-87 to develop and begin implementation of the Nepal National Conservation Strategy (NCS). EPM was the largest initial donor (along with CIDA and SDC) and played a critical oversight role in the early stages of the NCS development. EPM implementors, CIDE (then IIED), were not involved directly in activities in Nepal. The purpose of the evaluation team site visit to Nepal was to:

- Evaluate the effect of EPM funding (through IUCN) to the development and early implementation of Nepal's National Conservation Strategy.
- Examine the IUCN/World Conservation Strategy approach to natural resource management as a comparison to other approaches that EPM has supported, such as

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Environmental Action Plans in Africa.

- Examine early impact of the NCS effort. The Nepal NCS is further along in implementation than other efforts that the team examined in Africa and afforded the opportunity to examine to what extent the processes of environmental planning and management are being institutionalized in Nepal.

Evaluation team activities in Nepal: The final evaluation team met with the following people and organizations:

USAID/Nepal

Kelly Kammerer, Mission director
Teddy Wood-Stervinou, Deputy mission director
Sher Plunkett, Deputy chief, ARD
Toby Pierce, ARD
Tracey Parker, ARD
Alex Dickey, ARD

Swiss Development Cooperation

Reto Weiser, Deputy Director (Nepal)

His Majesty's Government, Nepal

Dr. Bharat Sharma, Deputy Director, Department of Housing and Urban Planning; Member, NCS Environmental Core Group

Dr. Leth Nath Belbase, Member, National Planning Commission

Mr. Bishwa Nath Sapkota, Chief, Environmental and Resources Conservation Division, National Planning Commission

National Planning Commission, National Conservation Strategy Implementation Program Office (IUCN/Nepal)

Mr. Jeremy Carew-Reid, Director

Environmental Planning Programme Team

Mr. Devendra Amatya, Project Coordinator
Mr. Krishna Oli, Senior Programme Officer
Mr. Anil Chitrakar, Programme Officer
Mr. Narayan Bhusal, Environmental Planner
Mr. Phool Chandra Shrestha, Environmental Planner

Environmental Impact Assessment Team

Dr. Ram Bahadur Khadka, Project Coordinator
Mr. Ajay Pradhan, Environmental Assessment Officer
Dr. Janardan Pandey, Environmental Engineer
Mr. Ganesh Ghimere, Programme Officer

Ms. Nabina Shresthe, Research Assistant
Ms. Angeline Ackermans, Urban planner
Mr. Madhur Kumar Shrestha, Research Assistant
Mr. Anil Chitrakar, Programme Officer

Heritage Programme Team

Dr. Bishnu Bhandari, Senior Programme Officer
Dr. Tirtha Man Maskey, Natural Heritage Consultant
Dr. Keshav Rajbhandari, Natural Heritage Consultant

Environmental Education Programme Team

Dr. Badri Dev Pandey, Project Coordinator
Mr. Uddhab B. Karki, Prog Off (formal ed)
Mrs. Bina Shrestha, Prog Off (formal ed)
Mr. Krishna Prasad Pradhan, Prog Off (non-formal ed)
Mr. Sunil K. Ranjit, Artist
Dr. Tirtha Bahadur Shrestha, Advisor
Ms. Kirtika Malla, Research Assistant
Mr. Chandra Manj Bhandari, Secretary

Public Information Programme

Ms. Premeeta Janssens-Sannon, Project Coordinator
Dr. Arzu Rana, Programme Officer

NGOs

Mr. Karna Sakya, President, Nepal Heritage Society, and
Member, National Council for the Conservation of
Natural and Cultural Resources

Mr. Anil Chitraker, Director, Environmental Camps for
Conservation Awareness

Principal findings:

Listed below are the preliminary summary findings that may be of interest to the mission. The team regards these findings as data that will contribute to conclusions and recommendations for the final evaluation report.

1. Clear evidence that environmental planning and management is in the process of being institutionalized in Nepal through implementation of the National Conservation Strategy. Clarity on the part of IUCN staff (formally this office should be called the National Planning Commission, NCS Implementation Program Office) that institutionalizing the process is the overall objective. Nepal is starting from scratch with respect to incorporating environmental planning and management into their overall development planning.
2. Vision for environmental planning and management in

Nepal: IUCN is working towards a capacity for Nepal in environmental planning and management at four levels: village, district, regional and national. The current implementation focus is top-down through policy development and bottom-up through development of village-level environmental plans. Several approaches at both levels are being tested on a model basis. Model efforts at the district and regional levels are also planned. After development of appropriate approaches at these different levels, a plan to disseminate these approaches to other villages, districts and regions will be developed.

3. Approach to institutionalization: IUCN has a strong commitment that "processes should lead institutional structures." Their approach is to work through an "Environmental Core Group" of approximately 30 senior-level technical officers in the government on development of several program themes (environmental planning and assessment, environmental education, public information, heritage conservation). This core group meets frequently for multi-year, intensive policy development workshops. For example, the Core Group has developed draft environmental impact assessment guidelines. The program work of the Core Group is also under the guidance of steering committees comprised of government and non-governmental representatives.

As people become more aware of linkages among sectors, the need for coordination, environmental policies, legislation and regulations, these structures slowly can be created. Under this evolutionary approach, ownership of future institutional structures is developing among the Core Group and their colleagues. IUCN believes that this approach will result in more lasting structures and a higher probability that environmental planning and management will be incorporated in development planning in Nepal. They believe that the value of instilling ownership is that it leaves in place a network of people committed to and capable of environmental planning and management. In fact, some agencies are already implementing the draft environmental impact assessment procedures in advance of formal government adoption.

4. An important issue for Nepal, as well as other countries, is how to achieve effective coordination among sectoral ministries that have critical responsibilities for environmental management. In Nepal there is a consensus that the environment should not be compartmentalized into a separate ministry, which would run the risk of having it compete rather than

cooperate with other sectoral ministries. A sectoral approach is consciously being avoided at all costs. There is instead a consensus on the need for an effective coordinating agency. The National Council for the Conservation of Natural and Cultural Resources is a newly created body of government, non-government and private sector members, that seeks to fulfil these coordination functions. Technically it is an advisory body to the National Planning Commission (NPC). The Environmental and Resources Conservation Division of the NPC serves as its secretariat for the moment. The institutional vision is that this National Council will eventually be replaced by an agency, such as a Nepal Environmental Planning and Protection Agency, that will have legally mandated powers to develop and enforce policy and regulations regarding environmental planning and management. In the meantime, IUCN is consciously trying to development the capacity to perform the eventual functions of such an agency through the Environmental Core Group.

5. Role of IUCN in Nepal: The IUCN office in Nepal should formally be called the National Planning Commission NCS Implementation Program Office. A memorandum of understanding is about to be signed between the NPC and IUCN, which would make the NPC Environment and Resources Conservation Division Chief the formal project director. The IUCN office at the moment is performing the secretariat functions necessary for implementation of the NCS. This role supplements the thin technical capacities of their counterparts in the Environmental Division of the NPC.

With respect to NCS implementation the IUCN staff repeatedly referred to themselves as "facilitators." Almost every implementation activity is achieved through collaboration with government officials (e.g. Environmental Core Group, program Steering Committees) or non-governmental organizations.

Apart from their role in implementing the NCS, IUCN is playing several other roles of importance to Nepal. First, IUCN is recognized as a highly credible technical body that is capable of advising on environmental matters. Second, it serves as a consortium of Nepal NGOs and is nurturing the development of several new environmental NGOs. Third, IUCN can operate as an interface between donors and the government. IUCN has a unique entry point to the government as it is an intergovernmental organization with both state and non-governmental member organizations. The government of Nepal has

requested IUCN to establish an IUCN/Nepal office to continue to perform these roles beyond the context of NCS implementation. Establishment of an IUCN/Nepal office would support several resolutions taken at the recent IUCN General Assembly in December 1990, i.e. to decentralize IUCN operations through establishment of country and regional offices, especially in the developing world.

6. The current political environment of increased decentralization and democratization is favoring the development of participatory environmental planning and management at all levels (village, district, regional, national). In addition, it is favoring the development and leadership of NGOs in all sectors of Nepal development.
7. IUCN played a role in assuring the strong environmental voice in the new constitution by working with the NPC on a formal submission to the Constitutional Commission regarding the environmental focus of the new constitution.
8. AID's strong interest in promoting democratic pluralism is finding expression in the aspects of the NCS implementation that encourage village-based natural resources management and increased leadership roles of local and national NGOs in the environmental sector. Managing the environment is a daily activity for rural Nepali's, especially for women who bear the immediate costs of continued environmental degradation.

MEMORANDUM

TO: USAID/Thailand

FROM: Final Evaluation Team, S&T/FENR Environmental Planning
and Management Project (936-5517)

S&T/FENR, Cynthia Jensen, AAAS Fellow
John Rigby, External consultant

SUBJECT: Site visit to Thailand by Final Evaluation Team, May 8,
1991

DATE: May 11, 1991

Evaluation and site visit purpose: Two members of the final evaluation team (Cynthia Jensen, John Rigby) for the S&T/FENR Environmental Planning and Management (EPM) project visited Thailand May 8, 1991. This project is implemented through a cooperative agreement with the World Resources Institute's (WRI) Center for International Development and Environment (CIDE, formerly the International Institute for Environment and Development, North America - IIED-NA).

The purpose of evaluation site visits is to examine EPM activities (since the mid-term evaluation in 1985), achievements and impact through discussions with the people and organizations that implemented the activities and through review of relevant documents. Conclusions and recommendations from the evaluation will help capture what we have learned during the life of the project and help guide the design of a follow-on, EPM II, project.

The EPM evaluation team visited Thailand primarily because they were transiting through the country. EPM activities in Thailand have been numerous but relatively unrelated to each other. Many of them date to 1985 and earlier. Thailand was not chosen as a primary country to visit, because the team felt it would be too difficult to track down individuals with direct knowledge of the individual activities.

EPM activities in Thailand: EPM has supported a variety of activities in Thailand from 1985 to present (a mission buy-in was pending at the time that USAID funds were frozen) including the following:

- Workshops and demonstrations on use of IPT given to government planners and NGOs in Africa and Asia (1986)
- Editing of environmental profile of Thailand (1986)
- Review of USAID mission program in natural resources management and Kasetsart University's proposal to

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conserve monsoon forests (1986)

- Workshops and seminars on IPT given to Asian Institute of Technology and Asian Development Bank (1987)
- Training workshop on economic evaluation of environmental impacts in watershed areas (1987)
- Agroecosystem analysis training workshops (1987)
- Technical support for the design of the institutional strengthening component of proposed Manres project, including analysis of potential NGO involvement (1987)
- Forestry small grant to WWF/Thailand, NGOs (1989)
- Assistance in development of a national disaster assistance plan (1990)
- Assistance to USAID in preparing TOR for mission buy-in for a variety of activities under Manres (1990)
- Pending mission buy-in (probably no longer possible because of curtailment of USAID program due to political situation) for a variety of activities under Manres

(There have been other WRI/CIDE activities in Thailand since 1985 not funded by EPM.)

Evaluation team activities in Thailand: Scheduling constraints limited the evaluation team's visit in Thailand to only one full day at the conclusion of the visit in Nepal. The evaluation team was able to maximize its very short time in Thailand because of the facilitation and scheduling support provided by Dr. Kathryn Saterson of USAID/Thailand. Almost contemporaneously with the Thailand visit, evaluation team member Art Hanson met in Washington, D.C. with USAID/Thailand Natural Resources Officer Will Knowland.

The final evaluation team met with the following people and organizations in Thailand on May 8, 1991:

AID/ASEAN Office:
Lawrence Ervin, Director

USAID/Thailand:
Dr. Kathryn A. Saterson, Natural Resources Officer
Apichai Sunchindah, Program Specialist, Natural Resources & Environment

Office of the National Environment Board (ONEB), Royal Thai

Government:

Saksit Tridech, Director, Natural Resources and
Environmental Management Coordination Division

NGOs:

Pisit na Patalung, Secretary General, Wildlife Fund of
Thailand

Heather Clark, Program Director, and Daonole Srikajon,
Program Coordinator, Private Agencies Collaborating
Together (PACT)

4. Principal findings:

Listed below are the preliminary summary findings of the evaluation team that may be of relevance to the mission. The team regards these findings as data that will contribute to conclusions and recommendations for the final evaluation report.

1. The Thailand Resources Profile, to which EPM contributed, has had continuing utility in Thailand. It was relied upon for priority setting in Manres design. It has served as starting point for annual Royal Thai Government (RTG) environmental statement for the President. It remains in high demand, including in retail book outlets.
2. The next RTG 5-year plan will, for the first time, include as one of the seven principal elements concern for the environment and natural resources. The Thailand Resources Profile may well have contributed to heightened consciousness of "brown" issues, but the causal connection cannot be traced.
3. The Office of the National Environment Board (ONEB) would like to see the Resources Profile be elaborated from a policy statement to a more of a strategic or planning instrument and process. At present, however, there are no specific steps in this direction.
4. The RTG (ONEB) is attempting to develop a capacity for natural resources data management but is perhaps five years away from having an effective information system in place for planning and monitoring, including GIS. Data management is an area of need.
5. EPM direct contributions (through IIED-NA) to Manres design -- on sustainable agriculture and NGO components -- viewed by USAID as high quality, contributed to identification of important issues, but were not formally incorporated into final project design.

6. RTG, USAID, and ASEAN are increasingly directing attention and interest to urban pollution control questions.
7. NGOs are increasingly effective in the public debates on the environment in Thailand, and in influencing environmental policy issues. In environmental matters, Thai NGOs are more involved in advocacy and monitoring than operationally; international NGOs are operational (e.g., community forestry, sustainable agriculture).
8. NGO policy influence is felt less in direct discourse with the RTG -- the RTG-NGO communications links are not yet well developed, and the NGOs may lack technical credibility -- than indirectly through public opinion mobilization within Thailand as well as through donor pressures through international NGO linkages. NGOs in Thailand are increasingly effective in gaining access to media coverage.
9. WRI has somewhat negative reputation within Thailand NGO community by virtue of WRI role in promotion of TFAP. (There have also been several WRI -- non-CIDE or EPM -- public presentations in Thailand which were not well received by the Thai NGO community.) The Plan is closely associated in public debate in Thailand with the industrialized forestry approach, most specifically with eucalyptus plantations. The "eucalyptus" issue is the principal point of public/NGO confrontation with the RTG in the natural resources field; WRI is perceived as being more on the side of "economics" vs. the "livelihood/environment" emphasis of the NGOs. Recent press reports do note WRI's challenge of the TFAP thrust. (The WRI-CIDE advice to FINNIDA to expand the Forest Plan process for much wider participation by NGOs apparently is not known in Thailand.)
10. One of the major public criticisms of the Thailand Forestry Master Plan (including by the NGOs) is the heavy reliance upon expatriate inputs. Of the 22 major areas of consultancies contracted for the Plan preparation, only 9 were prime contracts through Thai institutions.
11. EPM NGO support program included a small grant to Wildlife Fund of Thailand (WFT). The support is viewed by WFT as being very timely, and very helpful. It was used to support community mobilization in opposition to a dam (Haew Narok Hydro). WFT January 1991 final report to WRI expresses appreciation for WRI contribution to forest preservation in Thailand.

12. Future role for EPM in Thailand quite clouded, and likely precluded for near future, by current suspension of USAID activities.
13. Thailand was the context of early development of agroecosystem analysis, RRA and other similar methods by Gordon Conway, Terry Grant and others -- some of which was supported by EPM. RRA-like methods are being used extensively in Thailand in a variety of systems (agric, coastal, urban) and for both environmental planning and environmental impact assessment. Formal network of people and organizations who use RRA-like methods is well developed (e.g. annual farming systems conference) and promoting cross-fertilization.

HONDURAS - EPM SITE VISIT

Dr. John Swallow, S&T/FENR

April 17 - 22, 1991

Country Summary

Honduras was visited for several reasons. First, its President and administration have expressed their intention to confront and seek solutions to the country's major environmental and natural resource (ENR) problems. Second, USAID/Honduras warmly welcomed the visit. It is a large Mission with a growing emphasis in the ENR area; a chief activity is the new Land Use and Productivity Project (LUPE), a \$44 million USAID investment. Third, Honduras has a representative variety of ENR concerns, which are prevalent in both rural and urban areas, are agriculturally- and industrially-related, and many of which will become worse very soon unless difficult choices are made and remedial action taken. The threat of a cholera epidemic is an immense fear. Lastly, several small grants have gone to Honduras in the late 1980's under the EPM Project, most notably to strengthen the Honduran Ecological Association (AHE), an NGO formed in the mid-1970's. Another EPM activity was a road rehabilitation impact study, conducted in 1985.

Apart from large GOH-related projects such as LUPE, most A.I.D. funds for ENR projects and programs in Honduras have come from USAID/Honduras directly. These appear to be principally grants to Honduran HGOs for institutional strengthening and for equipment.

Interviews were conducted with Hondurans who were are are now in leadership positions with the AHE, and with several key GOH authorities, including the country's chief environmental official. A half-day trip was made to confer with authorities at the Pan American School of Agriculture (Zamorano) because that institution reportedly has been and will be involved with Central American regional activities related to EPM project work.

The modest grant to the AHE was made in two installments. Approximately \$2,000 were given to the AHE in August, 1987 to host a meeting of REDES/Central America in Honduras. REDES had been recently formed as a coalition of ENR-related NGOs in Central America. REDES has received about \$20,000 from the Center in non-EPM funds and has been a disappointment to it and, reportedly, to other U.S. NGOs. However, nearly all external assistance has been directed to hold multi-national meetings, with little continual programmatic, project or administrative support between these conclaves. The evaluation team feels REDES has definite, key roles and could engender positive results if it received this continual, albeit modest, financial and occasional

technical support.

The \$5,000 second portion was given more than two years later. An Honduran consulting firm was contracted to do a revision of AHE's organizational structure and by-laws. The Center approved the local consulting firm and its plans. Importantly, the result was a process by which an operational manual for AHE was compiled; the manual defined AHE's regulations, administrative operations, and organizational structure.

The results from the road rehabilitation impact study and Zamorano were less conclusive. The EPM evaluation team member could not find anyone in USAID/Honduras who was acquainted with or could locate the study. Zamorano officials had carried out \$40,000 in work under the LUPE Project and were awaiting payment. They expressed the desire to coordinate more closely and receive more guidance from both the GOH and USAID. It is obvious Zamorano represents a sizable resource for Honduras and other countries. The institution is embarking upon a new degree program in natural resources and biological conservation, and is beginning community outreach and short-term training and programs in such areas as reforestation and watershed management, in addition to its other, continuing ENR-related activities.

Hondurans of both the GOH and NGOs spoke freely of their country's principal ENR problems. Loss of forests, land tenure, watershed management, loss of soils, urban/industrial pollution and toxic wastes were the chief dilemmas mentioned. Water and its quality are critical problems nationwide. Poverty compounds all these problems. The evaluation team member was struck by the frequency and strength with which Hondurans spoke of urban and toxic matters. There is no sewerage nor primary treatment of sewage. There are open dumping sites for garbage. Chemical wastes from factories spew directly into streams or onto the ground. There are few controls, and a prerequisite is the identification of the sources of contamination. Planning meetings with the industrial sector are required to define the norms and regulations. The need for training in ENR and human resources development was frequently expressed.

Most Hondurans interviewed mentioned the proliferation of environmentally-oriented NGOs in the country. Such NGOs are formed for various reasons: out of genuine need and concern; it's also now chic to be concerned with the environment; there are real and imagined new moneies for the area, especially from abroad; because people wish to be on the "cutting edge"; etc. Interviewees generally expressed negativism at this proliferation and the duplication, sharp mutual criticism and confusion that accompany it. The AHE has gone through a difficult last few years, with continuism in office by its (former) head, lack of clear purposes and procedures, and ill-spent funds being the

chief accusations. Yet, AHE is seen by those interviewed as the one truly national NGO that can work in the ENR field. An audit of AHE by USAID/Honduras, now underway and at the AHE's request, may help this NGO to regain its stature and effectiveness.

Persons interviewed in Honduras:

Dr. Keith Andrews, head of Vegetable Protection Department, Zamorano (Professor of Entomology, University of Florida on long-term leave)

Ing. Franklin Bertrand, Executive Secretary, National Commission of the Environment and Development (CONAMA, GOH) and Environmental Advisor to President Callejas

Lic. Jorge Betancourt, Associate Director of Peace Corps/Honduras for Natural Resources, Ex-President & Chairman of Board of Directors, AHE

Dinie Espinal de Rueda, Training Coordinator, Rural Development Program, Zamorano

Ing. Elena Fullerton, President, Honduran Ecological Association (AHE)

Dr. Jorge Roman, Dean, Escuela Agricola Panamericana (Zamorano)

Ing. Rigoberto Romero, Executive Director in Secretary of Natural Resources (GOH) of LUPE, a \$40 million A.I.D.-financed project; founder and ex-Executive Director of AHE

Ing. Alfredo Rueda, Assistant Professor, Plant Protections, Zamorano

USAID/Honduras:

Dr. Craig Anderson, Ag. Dev. Officer, Zamorano liaison officer

Ing. Ramon Alvarez, Forestry Advisor

Eng. Rolando Chavarria, Engineering Office

Peter Hearne, LUPE Project Officer

Dr. Wesley Kline, Agricultural Research Advisor

Delbert McCluskey, Chief, Agricultural Export Division

Rafel Rosario, Chief, Agricultural Natural Resources Division

Dr. John Warren, Mission Environmental Officer

GUATEMALA - EPM SITE VISIT

Dr. John Swallow, S&T/FENR

April 23 - 27, 1991

Country Summary

Guatemala is a focal point for EPM activities conducted on a regional basis and also bilaterally. Guatemala is the headquarters of the Central American Commission of Environment and Development (CCAD), formed in 1989, as well as for A.I.D.'s Regional office for Central America and Panama (ROCAP).

EPM and Center personnel participated in much of the planning and preparatory work that led to ROCAP's Natural Resources Management Project (RENARM) for the region. This included a much-acclaimed environment and natural resources (ENR) assessment for Central America, strategy meetings, and conclaves related to institutional and policy studies. Bilaterally, the main efforts have been training courses to strengthen NGOs, an environmental profile and a biodiversity assessment.

The evaluation team member interviewed the Executive Secretary of CCAD, the head of a coalition (ASCINDES) of 39 NGOs which are beginning to work in ENR, several other NGO officials and selected personnel of USAID/Guatemala. He did not interview relevant ROCAP career and contract personnel, several of whom were out of the country. Two chief ROCAP officials were interviewed in Washington the same week by another evaluation team member.

The bilaterally-conducted EPM activities are applauded and appear to complement one another. They are portrayed as good sector support activities by USAID/Guatemala personnel. The environmental profile was carried out in 1987, has served largely as a source of reference, and is considered by some people a bit too general. The biodiversity assessment of December 1988 was termed a "smash hit." It initiated a process which led to the Protected Areas Law of Guatemala and, eventually, to the creation of the National Council of the Environment (CONAMA), the GOG's highest-ranking environmental body.

The four-day Institutional Strengthening Workshop for Guatemalan NGOs conducted in February 1990 was attended by 31 representatives of 24 different Guatemalan organizations. Two Center consultants organized and ran the workshop, which was aimed to train NGO members in strategic planning and proposal writing. Center staff say the workshop apparently achieved its objectives, though some attendees found the content and delivery of some workshop presenters inept and boring. The Center's Participatory Rural Appraisal (PRA) model was utilized. One

problem was the length of the workshop, as many busy NGO representatives felt they could not easily be away at a workshop for that amount of time.

ASCINDES, most of whose 38 member NGOs are just recently branching into ENR activities, has received two grants from the Center under the EPM Project, mainly to assist Guatemalan NGOs contribute to the Guatemalan Tropical Forestry Action Plan (TFAP). The Center's NGO Coordinator through a \$2,000 grant helped ASCINDES conduct a workshop designed to implement the TFAP methodology. Then came a \$10,000 grant to help plan and then conduct a workshop, and to have a second workshop in November 1990 to which ASCINDES invited 25 affiliated and non-affiliated institutions. The Center's forestry specialist received outstanding reviews for his planning skills, his labors as the workshops' facilitator and for his solid technical abilities. ASCINDES and the Center hope this collaboration will continue.

The Center and CCAD, which cooperates with a number of U.S. NGOs, have worked together on several endeavors. The CCAD Executive Secretary and the Center's EPM Manager have known each other and collaborated informally when the former was head of Guatemala's National Commission on the Environment (CONAMA). In May 1990, the Center's Project Manager and NGO Manager were the facilitators or resource persons for a two-day meeting to discuss implementation of CCAD's Plan of Action. The CCAD Executive Secretary said the meeting, whose overall costs approximated \$10,000, had two salient results: (1) Central Americans could lay out and order all the ideas they had; and (2) it helped move El Salvador and Honduras to form national environmental commissions, and for Guatemala to strengthen its.

A more recent activity, representing slightly more than \$20,000, was the Center's contracting through EPM with INCAE to conduct a study about negotiating debt swaps, especially owed to A.I.D., of the various Central American countries. CCAD representatives believe it is most important to train each country in negotiating its debt. CCAD feels an organization such as WRI/CIDE is significant in this project to work with the U.S. Congress and to coordinate with U.S. and other international NGOs. The CCAD Executive Secretary foresees WRI assistance in strengthening CCAD's infrastructure and in helping as a sounding board and ally in carrying out its action plan and follow-up work.

Persons interviewed in Guatemala:

Arg. Jorge Cabrera, Executive Secretary, Central American Commission of Environment and Development; also, ex-head of CONAMA

Ing. Hector Centeno, Presidente, Fundacion Defensores de la Naturaleza, and Presidente4 of REDES, Guatemalan chapter

Ing. Christian Munduate, Acting Exec. Dir., Assn. of Non-Governmental Development and Service Entities of Guatemala (ASCINDES)

Magali Rwey, Vice-President, Defensores de la Naturaleza

USAID/Guatemala:

Keith L. Kline, Env. & Nat. Res. Advisor

Alfred Nakatsuma, Environmental Officer /

Gordon A. Straub, Chief, ARD Division

ROCAP:

William Sugrue, RENARM Project Manager

Henry Tschinkel, Regional Forestry Advisor

BOLIVIA - EPM SITE VISIT

Dr. John Swallow, S&T/FENR

April 29 - May 4, 1991

Country Summary

Bolivia has been the scenario of a wide array of EPM-funded activities, most of which can be categorized as either resource assessments or NGO support efforts. There have been some nine separate but, for the most part, related actions. Through them the Center and A.I.D. have attempted to take advantage of an guide the rapidly-growing awareness among Bolivians of the enormous importance of using wisely their natural resources. Bolivia is still 58% forested, relatively underpopulated compared to many other countries, and has a higher percentage of its national territory in the Amazon than any other nation. The LAC Bureau environmental coordinator and his staff consider Bolivia to be a "mainstream" country regarding the EPM Project; they were clear in recommending an evaluative visit to the country. Moreover, USAID/Bolivia was most receptive to having Bolivia so included as part of the EPM evaluation.

The EPM-related assistance includes the scope of work for the Bolivian country environmental profile (CEP) in 1985, Bolivian land use and environmental studies conducted in 1985-85, strategic planning and workshops through LIDEMA (a coalition of 18 Bolivian NGOs working in environment and natural resources (ENR)) over the past six years, work related to Bolivia's Tropical Forestry Action Plan (TFAP), as a country visited in preparing the LAC Bureau's Environment and Natural Resources strategy, and recent involvement -- through LIDEMA -- in Bolivia's Environmental Action Plan (EAP).

Bolivian and USAID/Bolivia officials interviewed have respect and a healthy regard for the quality of Center staff and consultants who have carried out EPM-funded activities in the country. Most of the activities are viewed positively, though it is difficult to ascertain clear results and lasting effects from them, much less a distinct trajectory of coordinated actions among them. That may well change now as Center and EPM activities are channeled into the broad but defined EAP initiative. Several Bolivians interviewed mentioned that many of their institutions suffer from weakness and instability. Another problem apparently is that grassroots and particularly rural people, the majority in Bolivia, have not been truly represented in Bolivia. Interviewees stated that only a few of LIDEMA's member NGOs are doing anything effective in the ENR field, in part because they have not been comprised of nor addressed the concerns of most campesinos, rural poor and non-elitist youth.

The Center's and EPM's work in the 1985-86 period appear to have been solid technically and immediately useful, according to the few persons interviewed who remembered or had heard of that work. Consultant Dennis McCaffrey's technical assistance to the design and scope of work for the CEP helped that endeavor off to a positive start. The series of three land use and environmental studies by Joseph Tosi of the the Tropical Science Center/Costa Rica were reportedly well-done, and provided information and recommendations that were useful background for the development of Bolivian environmental legislation. In the few days the team member had in Bolivia, no one could be found who was acquainted with Ivon Pires' review of Bolivian environmental legislation.

The Center's NGO focus on organizational development and interest in working with umbrella organizations are clearly reflected in its work in Bolivia in the 1985-91 period. The efforts through LIDEMA, a coalition of NGOs (now numbering 18) which work in the environment and natural resources (ENR) area. IIED/NA and EPM helped LIDEMA develop a long-term strategy and its members organize proposals to the Bolivian P.L. 480 program. LIDEMA and IIED sponsored a grantsmanship workshop in September, 1987. LIDEMA received a \$20,000 grant in 1987-88 for long-term institutional development and to strengthen its organizational structure. More funds were given to have an environmental assessment workshop in September, 1989 for institutional members who were working with the P.L. 480 program. Two more of these workshops have been held since then.

Interviews revealed mixed results from LIDEMA's work, especially from the workshops it has organized and sponsored. Many interviewees acknowledge that it is difficult to measure NGOs and their work. How does one reliably quantify planning and policy progress in ENR (except somewhat for forestry)? However, a two-year study conducted of LIDEMA was not flattering. It asserts that its three environmental impact assessment workshops accomplished very little. Workshop quality as judged by the study and interviewees widely varied; some workshops were good, others mediocre and still others quite poor. LIDEMA has been unable to activate more than five or six of its 18 member institutions for any substantive NGO work. Careful planning, evaluation and effective follow-up are largely lacking. Institutional pride and fear that LIDEMA will steal the credit for their efforts evidently affect some individual NGOs, to the detriment of salient ENR collaboration. In its defense, LIDEMA would have benefitted from more contact and exchange with Center personnel.

Interviewees stated, and the evaluation team member agrees, that USAID/Bolivia is not staffed in the ENR area and that this impedes progress and planning under EPM and other auspices. The Mission has not selected its Natural Resources Advisor yet, but supposedly soon will. Meanwhile, LIDEMA and other Bolivian ENR

organizations suffer from not having a definite, informative, continual contact point within USAID.

The broadest effort and brightest hopes for the Center and EPM Project to make acknowledged, tangible contributions to Bolivian socio-economic development are through the EAP process, which formally began at 1990's end. The GOB and Center have selected LIDEMA to be the main vehicle for NGO and common citizen participation in the EAP, and early indications are that LIDEMA is doing good work and its efforts are appreciated by the GOB and USAID/Bolivia.

The Center and EPM played significant roles in establishing the EAP. In late 1990, \$17,000 from EPM helped pay for short-term services of selected Bolivians to organize planning and catalyze actions for the EAP process, until such time as more permanent financial support could be obtained from the P.L. 480 program. While other funds could likely have been found eventually, the Center and EPM were there, on-the-spot, providing flexibility and a rapid, positive funding response. The Center/EPM also gave \$15,000 for a successful late April, 1991 workshop in Titicaca organized chiefly by the EAP Executive Director and LIDEMA to engender NGO and grass-roots participation in the EAP. In this instance, as in the previous, the Center responded quickly and with administrative ease through the EPM Project. Among the 47 participants in the Titicaca workshop were the head of the Senate committee in charge of the environment and a senator from the opposition.

The Bolivian EAP is viewed and conducted as a continual planning process characterized by wide discussion, collegiality and clear definition of roles. While WRI exercised a key function early on -- and, in fact, top Bolivian authorities say more WRI involvement early in the EAP process would have been most useful -- the EAP is now seen as a Bolivian initiative, with WRI and other foreign NGOs in a consultative, supportive role. Thus, the Center's funding role is now largely finished, as seen by the EAP Executive Director, and the consultative process has begun. Bolivians appreciate the fact that several times WRI sent its approval and money without having a staff member present to verify plans. The GOB will present the EAP to the Bolivia Consultative Group in July. Other EAP deliberations are geared toward the UNCED meeting in Brazil in June, 1992 and the Bolivian TFAP before the EAP is scheduled to end formally March 31, 1993. The head of the EAP says strategy and methodology are key elements, feels the EAP is an original product, and views the Bolivian EAP as a model for all of Latin America.

Training and human resources development were stated as needs by all persons interviewed, and several mentioned the need for assistance in the area of natural resources data management. Training in natural resources economics is ardently desired by

Bolivians; they affirm that Bolivian economicists are not generally acquainted with environmental issues, particularly true in national cost accounting. Other frequently mentioned fields where training is reportedly needed are natural forest management, protected areas, soils management, and biodiversity. Training and expertise to alleviate urban/industrial pollution and toxic wastes were also prominent. Data management needs for FONAMA and selected other Bolivian entities are assistance with conceptualizing the establishment and operation of a natural resources data system.

USAID/Bolivia seems ready to participate more fully in efforts that complement those of the EAP, LIDEMA and the EPM Project generally, in addition to its continuing P.L. 480 and other local currency ENR-related activities. The Mission will begin a new natural resources management project in Fiscal Year 92, and a large new forestry project is slated to begin the following year.

Persons interviewed in Bolivia:

Lic. Carlos Enrique Arze, Executive Director, Liga de Defensa del Medio Ambiente (LIDEMA)

Dr. Carlos E. Brockmann, Executive Secretary, P.L. 480

Lic. Jorge Cortes, Director Ejecutivo, EAP-Bolivia

Ing. Carlos Quitela, Executive Director, Fondo Nacional para el Medio Ambiente (FONAMA)

Ing. Rodolfo Quiroga, Systems Chief, Centro de Investigaciones de la Capacidad de Uso Mayor de la Tierra (CUMAT)

Lic. Sergio Torres, UNDP, ex-Natural Resources Specialist, P.L. 480

USAID/Bolivia:

Ing. Jorge F. Calvo, PAO Project Manager

Charles Hash, Chapare Project Manager, ARD Division

Garber A. Davidson, Deputy Director

Paul H. Hartenberger, Chief, Health & Human Resources Division

Carl H. Leonard, Director

Darell L. McIntyre, Chief, ARD Division

Lawrence L. Odle, Jr., Project Development Officer

CHILE - EPM SITE VISIT

Dr. John Swallow, S&T/FENR

May 5-9, 1991

Country Summary

Nowhere have the enthusiasm, collegiality, immediate effects and tangible results of WRI's work and the EPM Project been as pronounced and positive as they have in Chile. In a span of two years, the newly-established USAID/Chile (consisting of one U.S. representative, a FSN projects coordinator, and a FSN accountant) has funneled four buy-ins and approximately \$600,000 of its limited funds to WRI/EPM to assist it in implementing well-conceived and -coordinated projects. WRI, through the the EPM Project, has in effect been the Environmental Division of USAID/Chile. Chilean governmental, university and private sector officials alike praise WRI, USAID/Chile and themselves for the quality, timeliness, realatively low cost and salient effects of this assistance. Importantly for this evaluation, the goal of the EPM is being well served: to "strengthen the capacity of public and private institutions in developing countries to better manage and conserve their natural resources for long-term sustainable development." the EPM Project objectives for the NRMSA, NRDM and NGO components are being implemented in Chile, also.

Discussion of an action to lessen environmental and natural resources (ENR) problems were muted during the Pinochet years of 1973-1989. Debate and concern were on the "back burner", and the GOC basically felt the country had to grow and export its way out of its foreign debt. No comprehensive ENR policy existed. There were limited environmental regulations, and there were weak institutional structures and information bases. Once democracy re-emerged in March, 1989, there erupted a backlog of pentup social demands and widespread anxiety and distress over the declining quality of Chile's air, water, fisheries, forests and arable lands.

The four USAID/Chile buy-ins to the EPM Project have enabled an array of allied activities to occur, with nearly each reinforcing the others. The first buy-in, for \$99,865 in FY 89, helped support an important environmental conference and underwrote the preparation of the ENR strategy for USAID/Chile and, practically, for Chile itself. The second and third, for \$148,721 and \$50,000 respectively, supported the implementation of the ENR strategy during FY 90. A \$300,000 buy-in for FY 91 is being finalized to support additional activities to further the objectives of the strategy.

Personal friendships and a generally ecumenical spirit

helped enrich ENR strategy development and ensuing enactment. The present Executive Secretary of the newly-formed National Commission of the Environment (CONAMA) was a close friend of WRI's EPM Project Manager when the former was affiliated with the Chilean Association for Environmental Law. The Center had a central role in preparing the ENR strategy from August to November 1989, collaborating closely with USAID/Chile, various consultants from USAID/Ecuador, S&T/FENR, the LAC Bureau's Regional Environmental Advisor, and a host of Chilean organizations and ENR specialists. The ENR strategy preparation was in itself a considerable accomplishment and medled well with EPM Project objectives of conducting useful basic research and analysis, fostering public education and awareness and strengthening ENR policy and institutions. The strategy guided all the protagonists together, logically, to concrete projects. The collegial and sharing manner of strategy preparation laid the groundwork for an especially fruitful continuing relationship.

Illustrative examples of activities carried out in Chile under the EPM Project include:

1. Design and application of indicators of environmental quality in Chile, carried out by the Urban Studies Institute and Department of Ecology of Chile's Catholic University. About \$40,000 of USAID/EPM funds are involved. This project is intended to establish an effective system for monitoring and measuring ENR quality and trends in the use of natural resources. The project is closely coordinated with CONAMA and World Bank financing will assist. The second phase, "Monitoring of the Environmental Indicators," is scheduled to begin in July 1991.
2. CONAMA is conducting an EIA methodologies and training project through a comparative analysis of EIA methods currently used in other countries (U.S., Spain, etc.). Another aim is to develop appropriate ways to apply EIA methodologies to certain investment projects, such as mining and smelting, forest product processing plants, etc.
3. \$25,000 to the Special Commission for the Decontamination of Santiago to help hold -- in early May, 1990 -- a successful three-day workshop for public agency officials on monitoring, measuring and controlling environmental degradation. The workshop was supposed to be modest-sized, however 130 municipal, health, police, NGO, etc. representatives attended. The workshop produced a useful document of the most pertinent regulations and where to go for more information. The evaluation team member was told these public officials are more knowledgeable about their ENR

functions and doing a better job in evaluating and measuring urban pollution.

4. A modest grant to Catholic University to publish 2,000 copies of Problemas Ambientales de Chile, the seminal work assisted by WRI and EPM which quantifies and illustrates the status of ENR in Chile. It is in essence an atlas of environmental problems. Each legislator in Chile -- 150 deputies and 75 senators -- received a copy of this impressive book financed by the EPM project.
5. CONAMA has carried out three of the planned six regional seminars throughout Chile using the Problemas book. University professors and researchers, GOC and local level officials, NGO representatives and others have participated in these spirited seminars, and each receives a copy of the atlas.
6. A Chilean economic research/think tank organization (CIEPLAN), recipient of a \$25,000 grant, organized and carried out a successful ENR economics seminar in November, 1990 in Concepcion, as well as a mini-conference in Santiago. It represented CIEPLAN's and one of the country's maiden efforts in NR economics. These EPM funds are also being used to publish seminar proceedings, and to fund two studies: one on depletion of Chile's fisheries and the other on the crucial forestry sector, based on application of national income accounting methodologies pioneered by WRI.
7. Support the preparation and publication of a "State of the Environment Report" describing environmental conditions and trends in Chile. The \$58,000 in EPM funds for this report will enable CONAMA and Catholic University to complete this project by December, 1991. the report will serve as a basis for the development of future ENR policy.
8. Assistance to a private ENR research and information center (CIPMA) to hold a large and heralded week-long national environmental conference, and to strengthen the communication and exchange of ENR information with bases in the 12 regions of Chile. The information network is being extended to the regional universities of La Serena and Temuco and the Chilean Library of Congress.
9. A \$10,000 grant for a project CONAMA titled "the Case for Biological Diversity in Chile." This publication will underscore the rich diversity of Chile's biological resources and their importance to the world

community. Chile is considered one of two South American countries rich in temperate forests and endemic species.

Much of the credit for the success of the EPM Project in Chile is due to the quality, foresight, and hard work of USAID/Chile's two professionals. They have served effectively as catalysts: establishing linkages; prompting funds and technical assistance; interestedly participating in planning sessions; and securing consensus among GOC and NGO organizations, WRI/CIDE, the U.S. Embassy and AID/Washington. Despite a large portfolio of activities in other fields, they are keenly attuned to their ENR work and EPM/WRI's problems, possibilities and past contributions. USAID/Chile has dealt professionally and in efficient, rapidly responsive terms with Chilean ENR groups and with WRI/CIDE. Numerous Chilean interviewees stated that A.I.D. was easily the earliest and most effective donor agency to assist them, and in many cases it has still been the only one, despite promises and professed good intentions from a variety of foreign governments, multilateral organizations, and other international groups.

EPM results and apparent lasting effects in Chile have been so positive because there have been both process and products. Clear, visible, and tangible "items, things" have complemented invigorating, enthusiastic processes. The re-emergence of democracy, some outstanding Chileans who are ENR leaders, a relatively well-trained human resource base and a political tradition of coalition-making enrich the process and bode for enhanced practical results. Chile is benefitting from having EPM, WRI and a good USAID/Chile staff present and on-the-ground to take advantage of this confluence of events.

Persons interviewed in Chile:

Ing. Eduardo Arriagada, President, Special Commission for the Decontamination of Santiago

Lic. Rafael Asenjo, Executive Secretary, National Commission for the Environment (CONAM), GOC

Dr. Guillermo Geisse, President, Centro de Investigacion y Planificacion del Medio Ambiente (CIPMA)

Dr. Patricio Gross, Director, Institute of Urban Studies, Universidad Catolica de Chile

Dr. Ernesto Hajek, Director, Department of Ecology, Universidad Catolica de Chile

Dr. Patricio Meller, Executive Director, Corporacion de Investigaciones Economicas para Latinoamerica (CIEPLAN)

Michael Nelson, Consultant Resource Economics, Operations Evaluation Department, The World Bank, consultant to CIPMA

Lic. Joaquin Vial, Economist, CIEPLAN

USAID/Chile:

Paul W. Fritz, Representative

Renato Hidalgo C., Coordinator of Projects

Peace Corps/Chile:

David Valenzuela, Director

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Appendix 7

EPM Evaluation Model Cable to USAIDs

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INITIALS

APPR: TJ _____
DRAFT: CJ _____
OTHER: _____
OTHER: _____
OTHER: _____

UNCLASSIFIED

AID/ST/FENR:CJENSEN:CJ:0549J
02-13-91 54392
AID/ST/FENR:TJOHNSON

ES:DMEIN
AID/ENE/TR/E:RGREENBERG {PHONE}
AID/LAC/DR/E:JWILSON {PHONE}

AID/APRE/DR/E:MKUX {PHONE}
AID/AFR/TR/ANR:JGAUDET {PHONE}
AID/ST/FENR:MPHILLEY {DRAFT}

ROUTINE AWIDE

ADM AID

E.O. 12356: N/A

TAGS:

SUBJECT: FINAL EVALUATION OF THE ST/FENR ENVIRONMENTAL
PLANNING AND MANAGEMENT PROJECT {EPM, 936-5517}

1. SUMMARY: THE AGENCY'S ENVIRONMENTAL PLANNING AND
MANAGEMENT PROJECT {EPM, 936-5517}, MANAGED BY ST/FENR,
WILL UNDERGO A FINAL EVALUATION BEGINNING IN MARCH
1991. THE EVALUATION IS IN ANTICIPATION OF THE DESIGN
OF A FOLLOW-ON EPM II PROJECT THAT WILL CONTINUE TO
SUPPORT THE AGENCY'S BURGEONING ENVIRONMENTAL AND
NATURAL RESOURCES {ENR} MANDATE AND PROGRAM. AT LEAST
49 COUNTRIES WORLDWIDE HAVE PARTICIPATED IN EPM SINCE
1985. THE BROAD TECHNICAL AND GEOGRAPHIC SCOPE OF THE
PROJECT PRECLUDES INDIVIDUAL SITE VISITS TO ALL MISSIONS
THAT HAVE BENEFITTED FROM THE PROJECT. HOWEVER, ST/FENR
VALUES MISSION PERSPECTIVE ON THIS PROJECT AND REQUESTS
MISSION INPUT TO THE EVALUATION. END SUMMARY.

2. BACKGROUND: THE ENVIRONMENTAL PLANNING AND
MANAGEMENT PROJECT {EPM} WAS ESTABLISHED IN 1982 AFTER
DISCUSSION AND PLANNING AMONG MISSIONS AND VARIOUS
A.I.D./W OFFICES. THE PURPOSE OF THE PROJECT IS TO HELP
STRENGTHEN THE CAPABILITIES OF PUBLIC AND PRIVATE

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INSTITUTIONS IN DEVELOPING COUNTRIES TO BETTER MANAGE AND CONSERVE THEIR NATURAL RESOURCES FOR LONG-TERM SUSTAINABLE DEVELOPMENT BY INCORPORATING NATURAL RESOURCES MANAGEMENT INTO DEVELOPMENT PLANNING. THE PROJECT IS IMPLEMENTED THROUGH A COOPERATIVE AGREEMENT BETWEEN ST/FENR AND THE WORLD RESOURCES INSTITUTE {WRI}, WHOSE CENTER FOR INTERNATIONAL DEVELOPMENT AND ENVIRONMENT {CIDE} IS RESPONSIBLE FOR CARRYING OUT THE ACTIVITIES OF THE PROJECT. {CIDE IS THE RESULT OF THE MERGER OF THE NORTH AMERICAN OFFICE OF THE INTERNATIONAL INSTITUTE FOR ENVIRONMENT AND DEVELOPMENT {IIED} AND WRI, WHICH TOOK PLACE IN 1988.} MANY PROJECT ACTIVITIES ARE ACCOMPLISHED THROUGH MISSION AND REGIONAL BUREAU BUY-INS.

3. THE PROJECT HAS HAD FOUR PROGRAM THEMES: {1} NATURAL RESOURCE MANAGEMENT ASSESSMENTS AND ANALYSIS, {2} NATURAL RESOURCE DATA AND PLANNING TECHNOLOGIES, {3} NON-GOVERNMENTAL ORGANIZATIONS SUPPORT, AND {4} SUSTAINABLE AGRICULTURAL DEVELOPMENT. SOME EXAMPLES OF ACTIVITIES INCLUDE:

A. NATURAL RESOURCE MANAGEMENT ASSESSMENTS AND ANALYSIS: SUPPORT FOR COUNTRY ENVIRONMENTAL PROFILES IN PARAGUAY, COLOMBIA, THE CENTRAL AMERICAN REGION, THAILAND AND JAMAICA; PARTICIPATION IN WORLD BANK/A.I.D. ENVIRONMENTAL ACTION PLANS IN RWANDA, MADAGASCAR AND GUINEA; PREPARATION OF RESOURCE ASSESSMENTS IN BANGLADESH AND INDONESIA AND TROPICAL FORESTRY AND BIODIVERSITY ASSESSMENTS IN GUATEMALA, ECUADOR AND THE EASTERN CARIBBEAN; PREPARATION OF ENR STRATEGIES FOR THE ANE AND LAC REGIONAL BUREAUS AND A.I.D./CHILE; AND POLICY ADVICE TO THE CENTRAL AMERICAN COMMISSION ON ENVIRONMENT AND DEVELOPMENT.

B. NATURAL RESOURCE DATA AND PLANNING TECHNOLOGIES: PREPARATION OF INDICATORS FOR MONITORING TRENDS IN NATURAL RESOURCE USE AND DEGRADATION IN AFRICA AND LATIN AMERICA; COMPILATION AND PUBLICATION OF THE DIRECTORY OF COUNTRY ENVIRONMENTAL STUDIES; DEVELOPMENT OF THE INTEGRATED PLANNING TECHNOLOGY {IPT} MODEL FOR ENR PLANNING; AND SUPPORT TO A.I.D./W ON CONGRESSIONAL REPORTING.

C. NON-GOVERNMENTAL ORGANIZATIONS SUPPORT: PROVISION OF MANAGEMENT ADVICE, TECHNICAL SUPPORT AND DIRECT

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GRANTS TO NGOS IN SOUTH AND CENTRAL AMERICA (LIDEMA, COMUNIDEC, REDES, ASOCIACION HONDURENA DE ECOLOGIA); SUPPORT FOR FROM THE GROUND UP, THE WRI/CIDE COMMUNITY-BASED ENR MANAGEMENT STUDIES IN 13 AFRICAN COUNTRIES; SUPPORT FOR HARIBON FOUNDATION IN THE PHILIPPINES; AND CONDUCT OF PARTICIPATORY RURAL APPRAISAL WORKSHOPS FOR NGOS IN AFRICA AND LATIN AMERICA.

D. SUSTAINABLE AGRICULTURAL DEVELOPMENT: SUPPORT FOR POLICY RESEARCH AND PUBLICATIONS DISSEMINATION ON SUSTAINABLE AGRICULTURE POLICY AND METHODOLOGIES THROUGH IIED/LONDON; CONDUCT OF RAPID RURAL APPRAISAL AND AGRO-ECOSYSTEMS ANALYSIS WORKSHOPS IN THAILAND, INDONESIA, PHILIPPINES, AND FOR A.I.D. AND NGO STAFF IN WASHINGTON; AND INTEGRATION OF SUSTAINABLE AGRICULTURAL COMPONENTS INTO ENR STRATEGIES FOR LAC AND ANE REGIONS.

4. FINAL EVALUATION: THE FINAL EVALUATION, SCHEDULED FOR MARCH - MAY, 1991, WILL EXAMINE PROJECT ACTIVITIES, ACHIEVEMENTS AND IMPACT. IMPORTANT ASPECTS INCLUDE PROJECT ROLE AND IMPACT ON HOST COUNTRY DEVELOPMENT PLANNING, MISSION INVOLVEMENT IN THE ENVIRONMENTAL SECTOR, THE AGENCY'S OVERALL ENVIRONMENTAL PROGRAM AND THE INSTITUTIONAL CAPACITY OF CIDE. THE EVALUATION TEAM WILL VISIT AT LEAST ONE COUNTRY IN EACH GEOGRAPHIC REGION TO INTERVIEW MISSION STAFF AND HOST COUNTRY PERSONNEL ON THEIR EXPERIENCE WITH THE EPM PROJECT. MISSIONS UNDER INITIAL CONSIDERATION INCLUDE BOLIVIA, COLUMBIA, CHILE, ROCAP, RWANDA, GUINEA, CAMEROON, MADAGASCAR, NEPAL, BANGLADESH, INDONESIA AND PHILIPPINES. CONCLUSIONS AND RECOMMENDATIONS FROM THE FINAL EVALUATION WILL HELP GUIDE THE DESIGN OF THE EPM II PROJECT, WHICH IS SLATED TO BEGIN IN FY92 AND WILL FURTHER SUPPORT A.I.D.'S ENR PROGRAM THROUGH THE 1990'S.

5. MISSION INPUT: SINCE IT IS NOT POSSIBLE TO VISIT ALL MISSIONS THAT HAVE BEEN INVOLVED WITH EPM, MISSION RESPONSES BY CABLE OR FAX ARE REQUESTED. IT IS EXPECTED THAT MISSIONS THAT HAVE HAD DIRECT EXPERIENCE WITH THE EPM PROJECT WILL WISH TO PROVIDE DETAILED COMMENT. ST/FENR ALSO WELCOMES INPUT FROM STAFF WHO MAY NOT HAVE WORKED WITH EPM IN THEIR PRESENT POST BUT MAY HAVE HAD EXPERIENCE WITH THE PROJECT AT ANOTHER MISSION. COMMENT ON FUTURE NEEDS AND PROGRAM SCOPE FROM THOSE WHO HAVE NOT WORKED WITH EPM ARE ALSO WELCOME. ANSWERS TO THE FOLLOWING QUESTIONS, AS APPROPRIATE, WOULD BE

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APPRECIATED.

A. ACTIVITIES: WHAT WERE THE MOST VALUABLE MISSION EXPERIENCES WITH EPM SINCE 1985, E.G. SPECIFIC ACTIVITIES, TECHNICAL ASSISTANCE, INFORMAL ADVISORY SERVICES? PLEASE LIST.

B. PARTICIPATION: HAVE CIDE, MISSION, AND HOST COUNTRY GOVERNMENT AGENCIES AND INSTITUTIONS COLLABORATED IN THE PROJECT ACTIVITY? HOW COULD COLLABORATION BE IMPROVED? PLEASE RATE THE LEVEL OF COLLABORATION {SPECIFY RELATIONSHIP, E.G. CIDE - MISSION, CIDE - HOST COUNTRY INSTITUTION} ON A SCALE OF 1 {LOW} TO 5 {HIGH}.

C. SATISFACTION: {1} WERE THE MISSION AND RELEVANT HOST COUNTRY INSTITUTIONS SATISFIED WITH THE CIDE'S ROLE AND PERFORMANCE? PLEASE RATE SATISFACTION ON A SCALE OF 1 {LOW} TO 5 {HIGH}. {2} WAS THE QUALITY OF WRITTEN DOCUMENTS PRODUCED UNDER EPM SUFFICIENT TO MEET THE NEEDS OF WHOEVER REQUESTED IT, TIMELY, AND OF VALUE WITH RESPECT TO FOLLOW-ON ACTIVITIES? PLEASE RATE {A} QUALITY, {B} TIMELINESS AND {C} CONTINUING VALUE ON A SCALE OF 1 {LOW} TO 5 {HIGH}.

D. IMPACT: {1} IN WHAT WAYS DID THE ACTIVITY CONTRIBUTE TO HOST COUNTRY DEVELOPMENT PLANNING AND POLICY FORMULATION REGARDING NATURAL RESOURCES MANAGEMENT? {2} WHAT FOLLOW-ON ACTIVITIES, POLICIES OR PROGRAMS, IF ANY, HAVE BEEN INITIATED IN {A} YOUR MISSION AND {B} AMONG YOUR HOST COUNTRY INSTITUTIONS IN WHOLE OR IN PART DUE TO THE EPM PROJECT?

E. RECOMMENDATIONS: BASED ON MISSION EXPERIENCE, WHAT RECOMMENDATIONS WOULD YOU MAKE TO IMPROVE THE {A} TECHNICAL FOCUS AND {B} IMPLEMENTATION OF A FOLLOW-ON PROJECT? DOES THE MISSION HAVE ANY NEEDS WHICH EPM CURRENTLY CANNOT MEET, BUT WHICH COULD BE MET IN A FOLLOW-ON PROJECT? IT SHOULD BE NOTED THAT A FUTURE EPM PROJECT MAY WISH TO INCLUDE ADDITIONAL EMPHASIS ON INSTITUTIONAL AND ECONOMIC POLICY ANALYSIS, ENR DATA MANAGEMENT AND INFORMATION SYSTEMS, ENR COMMUNICATIONS AND EDUCATION ACTIVITIES, AND URBAN AND INDUSTRIAL POLLUTION ISSUES. COMMENT ON THESE AND OTHER ENR AREAS THAT A FOLLOW-ON PROJECT MIGHT ADDRESS WOULD BE WELCOME.

6. PLEASE CABLE OR FAX {703-875-4639} YOUR RESPONSE TO ST/FENR, ATTENTION CYNTHIA JENSEN, BY MARCH 12, 1991.

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Appendix 8

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Annex to Nepal list:

List of contents of "Background papers to the national conservation strategy for Nepal". These papers are listed for information purposes. The evaluation team has only read the papers marked with an asterisk.

Volume I

1. Population and human settlements
2. Cultural heritage
- *3. Conservation awareness: public information, extension, education and training
- *4. The role of women in resource conservation and development
5. Water supply and sanitation
6. Agriculture and fisheries development
7. Surface and groundwater development for irrigation
8. Livestock development and pasture management
9. Soil conservation and watershed management

Volume II

10. Forest development, utilisation and management
11. Medicinal plants: their utilisation and management and the biological diversity of flora of Nepal
12. Biological diversity
13. National parks and protected areas
14. Wildlife management
15. Tourism and outdoor recreation
16. Energy development

- 17. Industrial development
- 18. Non-renewable resource development and hydrocarbon energy
- *19. International implications

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Appendix 9

List of People Interviewed

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LIST OF PEOPLE INTERVIEWED

Washington:

Center for International Development and Environment (CIDE):

Tom Fox, CIDE Director
Walter Arensberg, EPM Director
Kirk Talbott
Peter Veit
Aaron Zazueta
Ann Thrupp
Dan Tunstall
Nels Johnson
Janet Abramovitz
Bruce Cabarle
Kara Page
Kayla Martin
Cheryl Cort
Faye Kepner
Joanna Grand
Fred Mallya
Paul Faeth
Fred Weber, Consultant
Dave Groenfeldt, Consultant

World Resources Institute (WRI):

Gus Speth
Mohamed El Ashry
Robert Blake
Alvaro Umana, Central American Institute for Business
Administration (INCAE), Costa Rica, and WRI Board of
Directors

World Bank:

Leif Christofferson, Division Chief, AFTEN
Jeri Larson, Consultant, AFTEN
Albert Greve, Coordinator, Multi-donors Secretariat
Cynthia Cook, Senior Sociologist
Francois Falloux, Principal Environmentalist, AFTEN

A.I.D./Washington:

Siew Tuan Chew, PPC/CDIE
Jack Vanderryn, Director, S&T/EN
Twig Johnson, Director, S&T/FENR
Dan Deely, S&T/FENR
Mike Philley, EPM Project Manager, S&T/FENR
Jim Bonner, S&T/AGR
Ray Meyer, S&T/AGR
Bill Douglas, S&T/HR/RD/RI
Mike Yates, S&T/HR/RD
Jim Hester, Environmental Coordinator, LAC/DR/E
John Wilson, LAC/DR/E

Tom Hourigan, AAAS Fellow, LAC/DR/E
Ray Waldron, LAC/DR/RD
Molly Kux, Environmental Coordinator, APRE/DR/E
Ron Greenberg, Environmental Coordinator, ENE/TR/E
Jim Tarrant, Consultant, ENE/TR/E
Curt Nissly, ENE/TR
Gary Cohen, AFR/TR/ANR/NR
Dwight Walker, AFR/TR/ANR/NR
Tony Pryor, AFR/TR/ANR/NR
John Gaudet, Environmental Coordinator, AFR/TR/ANR/NR
Mike McGahuey, AFR/TR/ANR/NR
Larry Hausman, Environmental Coordinator, S&T
Carolyn Shumway, AAAS Fellow, S&T
Alexi Panehal, APRE/H
Frank Alejandro, S&T/PO
Bernadette Bundy, S&T/PO
Beverly Eighmy, USAID/Afghanistan
Eric Loken, USAID/Morocco
Charles Uphaus, USAID/Tunisia
Brad Fujimoto, USAID/Bangladesh
Ronald Curtis, USAID/ROCAP
Jack Vaughn, USAID/ROCAP

Former EPM staff:

David Richards
Steve Berwick, DAI
Diane Wood, World Wildlife Fund
Mary Lou Higgins, WWF

NGOs:

Barbara Wyckoff-Baird, Wildlands and Human Needs
Program, WWF
Bruce Leighty, Biodiversity Support Program, WWF
Janice Alcorn, Biodiversity Support Program, WWF
Michael Brown, PVO/NGO Natural Resources Management
Support Project, EIL/WWF
Vitus Fernando, IUCN

Rwanda:

USAID/Rwanda:

Jim Graham, Mission Director
Paul Crawford, ADO

USAID project personnel:

Bob Winterbottom, Environmental Advisor, Ministry of
Planning, USAID/Rwanda/NRMP
Glen Smucker, Project Manager, USAID/Rwanda/NRMP
Delane Welsh, USAID/Rwanda/SARFA
Paul Hanegreefs, USAID/Rwanda/SARFA
Julia Morris, S&T/FENR/FSP

Mary Scott, Research Triangle Institute, Rapid III

Government of Rwanda:

Andre Rwamakuba, Director, Project on Environment and Development

NGOs:

Juvenal Turatsinze, Association Rwandaise pour la Promotion du Developpement Integre
Dr. Joseph Kajyibwami, Executive Secretary, Association de Recherche et d'Appui en Amenagement du Territoire
Anicet Kayigema, Association de Recherche et d'Appui en Amenagement du Territoire

World Bank:

Emmanuel Akpa, Resident Representative

Ghana:

USAID/Ghana:

Peter Weisel
Bob Wuertz
Kim Hom

Environmental Protection Council (EPC):

Professor Clement Dorm-Adzobu, Director of Programs
A.A. Amoah, Principal Assistant Secretary
Angelina Kutin-Mensah, Assistant Public Relations Officer
Aboullah Iddrisu, Program Officer, Development Planning Division

Ghana Association of Private Voluntary Organizations in Development (GAPVOD):

T.K. Ollennu, Executive Secretary, GAPVOD
Dr. E.O. Laryea, Chairman, GAPVOD, and Project Director, Mayday Rural Project
A.J. Annorbah-Sarpei, Technical Advisor, GAPVOD, and Executive Chairman, Center for Community Studies, Action and Development
Kate Parkes, Treasurer, GAPVOD, National General Secretary of YWCA of Ghana, and Convener, WID-GAPVOD

Forestry Commission:

Francesca Ocran, Secretary to the Commission

Center for Community Studies, Action and Development (CENCOSAD)

Mr. Sarpei, Director

Kenya:

USAID/Kenya:

Jim Gingerich, ADO
Jim Dunn, Asst. ADO

REDSO:

Richard Pelleck, Regional Advisor, Natural
Resources/Policy

National Environmental Secretariat (NES):

Elizabeth Oduor-Noah

African Center for Technology Studies (ACTS):

Anthony Kifworo, Publications
Patrick Karani, Technology and Environment Program
Alison Field-Juma, Initiatives, Ltd. (publishers for
ACTS)

Other:

F. Ahmed, World Bank Agriculture office
Steve Berwick, DAI (formerly IIED-NA)

Nepal:

USAID/Nepal:

Kelly Kammerer, Mission director
Teddy Wood-Stervinou, Deputy mission director
Tobey Pierce, ARD
Sher Plunkett, Deputy Chief, ARD
Tracey Parker, ARD
Alex Dickey, ARD

Swiss Development Cooperation:

Reto Weiser, Deputy Director (Nepal)

**National Planning Commission, National Conservation
Strategy, Implementation Program Office (IUCN/Nepal):**

Mr. Jeremy Carew-Reid, Director

Environmental Planning Programme (EPP) Team

Mr. Devendra Amatya, Project Coordinator
Mr. Krishna Oli, Senior Programme Officer
Mr. Anil Chitrakar, Programme Officer
Mr. Narayan Bhusal, Environmental Planner
Mr. Phool Chandra Shretha, Environmental Planner

Environmental Impact Assessment (EIA) Team

Dr. Ram Bahadur Khadka, Project Coordinator
Mr. Ajay Pradhan, Environmental Assessment Officer

Dr. Janardan Pandey, Environmental Engineer
Mr. Ganesh Ghimere, Programme Officer
Ms. Nabina Shresthe, Research Assistant
Ms. Angeline Ackermans, Urban planner
Mr. Madhur Kumar Shrestha, Research Assistant
Mr. Anil Chitrakar, Programme Officer

Heritage Programme Team

Dr. Bishnu Bhandari, Senior Programme Officer
Dr. Tirtha Man Maskey, Natural Heritage Consultant
Dr. Keshav Rajbhandari, Natural Heritage Consultant

Environmental Education Programme (EEP) Team

Dr. Badri Dev Pandey, Project Coordinator
Mr. Uddhab B. Karki, Prog Off (formal ed)
Mrs. Bina Shrestha, Prog Off (formal ed)
Mr. Krishna Prasad Pradhan, Prog Off (non-formal ed)
Mr. Sunil K. Ranjit, Artist
Dr. Tirtha Bahadur Shrestha, Advisor
Ms. Kirtika Malla, Research Assistant
Mr. Chandra Manj Bhandari, Secretary

Public Information Programme (PIP)

Ms. Premeeta Janssens-Sannon, Project Coordinator
Dr. Arzu Rana, Programme Officer

His Majesty's Government:

Dr. Bharat Sharma, Deputy Director, Department of
Housing and Urban Planning; Member, NCS Environmental
Core Group

Dr. Lekh Nath Belbase, Member, National Planning
Commission

Mr. Bishwa Nath Sapkota, Chief, Environmental and
Resources Conservation Division, National Planning
Commission

NGOs:

Mr. Karna Sakya, Vice President, Nepal Heritage Society
and member, Council on Conservation of Natural and
Cultural Resources

Mr. Anil Chitraker, Director, Environmental Camps for
Conservation Awareness

Thailand:

USAID/Thailand:

Dr. Kathryn A. Saterson, Natural Resources Officer
Apichai Sunchindah, Program Specialist, Natural

Resources & Environment

AID/ASEAN Office:

Lawrence Ervin, Director

Office of the National Environment Board (ONEB), Royal Thai Government:

Saksit Tridech, Director, Natural Resources and Environmental Management Coordination Division

NGOs:

Pisit na Patalung, Secretary General, Wildlife Fund of Thailand

Heather Clark, Program Director, and Daonoie Srikajon, Program Coordinator, Private Agencies Collaborating Together (PACT)

Honduras:

Dr. Keith Andrews, head of Vegetable Protection Department, Zamorano (Professor of Entomology, University of Florida on long-term leave)

Ing. Franklin Bertrand, Executive Secretary, National Commission of the Environment and Development (CONAMA, GOH) and Environmental Advisor to President Callejas

Lic. Jorge Betancourt, Associate Director of Peace Corps/Honduras for Natural Resources, Ex-President & Chairman of Board of Directors, AHE

Dinie Espinal de Rueda, Training Coordinator, Rural Development Program, Zamorano

Ing. Elena Fullerton, President, Honduran Ecological Association (AHE)

Dr. Jorge Roman, Dean, Escuela Agricola Panamericana (Zamorano)

Ing. Rigoberto Romero, Executive Director in Secretary of Natural Resources (GOH) of LUPE, a \$40 million A.I.D.-financed project; founder and ex-Executive Director of AHE

Ing. Alfredo Rueda, Assistant Professor, Plant Protections, Zamorano

USAID/Honduras:

Dr. Craig Anderson, Ag. Dev. Officer, Zamorano liaison officer

Ing. Ramon Alvarez, Forestry Advisor
Eng. Rolando Chavarria, Engineering Office
Peter Hearne, LUPE Project Officer
Dr. Wesley Kline, Agricultural Research Advisor
Delbert McCluskey, Chief, Agricultural Export Division
Rafael Rosario, Chief, Agricultural Natural Resources
Division
Dr. John Warren, Mission Environmental Officer

Guatemala:

Arg. Jorge Cabrera, Executive Secretary, Central American
Commission of Environment and Development; also, ex-head of
CONAMA

Ing. Hector Centeno, Presidente, Fundacion Defensores de la
Naturaleza, and Presidente⁴ of REDES, Guatemalan chapter

Ing. Christian Munduate, Acting Exec. Dir., Assn. of Non-
Governmental Development and Service Entities of Guatemala
(ASCINDES)

Magali Rwey, Vice-President, Defensores de la Naturaleza

USAID/Guatemala:

Keith L. Kline, Env. & Nat. Res. Advisor

Alfred Nakatsuma, Environmental Officer

Gordon A. Straub, Chief, ARD Division

ROCAP:

William Sugrue, RENARM Project Manager

Henry Tschinkel, Regional Forestry Advisor

Bolivia:

Lic. Carlos Enrique Arze, Executive Director, Liga de
Defensa del Medio Ambiente (LIDEMA)

Dr. Carlos E. Brockmann, Executive Secretary, P.L. 480

Lic. Jorge Cortes, Director Ejecutivo, EAP-Bolivia

Ing. Carlos Quitela, Executive Director, Fondo Nacional para el Medio Ambiente (FONAMA)

Ing. Rodolfo Quiroga, Systems Chief, Centro de Investigaciones de la Capacidad de Uso Mayor de la Tierra (CUMAT)

Lic. Sergio Torres, UNDP, ex-Natural Resources Specialist, P.L. 480

USAID/Bolivia:

Ing. Jorge F. Calvo, PAO Project Manager

Charles Hash, Chapare Project Manager, ARD Division

Garber A. Davidson, Deputy Director

Paul H. Hartenberger, Chief, Health & Human Resources Division

Carl H. Leonard, Director

Darell L. McIntyre, Chief, ARD Division

Lawrence L. Odle, Jr., Project Development Officer

Chile:

Ing. Eduardo Arriagada, President, Special Commission for the Decontamination of Santiago

Lic. Rafael Asenjo, Executive Secretary, National Commission for the Environment (CONAM), GOC

Dr. Guillermo Geisse, President, Centro de Investigacion y Planificacion del Medio Ambiente (CIPMA)

Dr. Patricio Gross, Director, Institute of Urban Studies, Universidad Catolica de Chile

Dr. Ernesto Hajek, Director, Department of Ecology, Universidad Catolica de Chile

Dr. Patricio Meller, Executive Director, Corporacion de Investigaciones Economicas para Latinoamerica (CIEPLAN)

Michael Nelson, Consultant Resource Economics, Operations Evaluation Department, The World Bank, consultant to CIPMA

Lic. Joaquin Vial, Economist, CIEPLAN

USAID/Chile:

Paul W. Fritz, Representative

Renato Hidalgo C., Coordinator of Projects

Peace Corps/Chile:

David Valenzuela, Director

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Appendix 10

Evaluation Case Study: Rwanda-Ghana-Nepal

**Evaluation Case Study: Rwanda-Ghana-Nepal
(April/May 1991)**

**NRMSA Contribution
to NRM Institutionalization**

The evaluation examined the extent to which natural resource management and planning have been institutionalized through EPM.

The evaluation team found it useful to apply NRM institutionalization criteria outlined in one of the Center's own publications (Arensberg, W. 1990). This approach views NRM plans under NRMSA as "instruments of change", a process which effectively leads countries through a new set of institutional behaviors supporting NRM planning, such as data collection and analysis, identification of priority problems, recognition of priority needs, development of recommendations regarding priority actions, and creation of appropriate legislation, policies and institutional mandates to effectively implement actions.

Under this approach, the following questions are most relevant:

1. What environmental policies have been adopted as a result of the NRM plan and how are they being implemented?
2. What governmental institutions have been created to formulate policy, plans and investment programs for the environment? What institutions have been created to collect and analyze environmental data?
3. Do multi-sectoral coordination mechanisms exist to integrate environment into overall development planning and how well do they function?
4. Is the government effectively involved in environmental assessment of development projects?
5. What mechanisms exist for private sector and NGO participation in policy-making?

The EPM evaluation field visits provided opportunity for closer views of the institutional impact of NRMSA in three countries: Rwanda and Ghana, where the Center has assisted in developing National Environmental Action Plans (NEAP), and Nepal, where EPM (with funds channeled through the Center to IUCN) provided early and timely assistance in the development of a National Conservation Strategy (NCS). These efforts are described in the separate country trip reports (Appendix 5). As with many EPM involvements, it is difficult to attribute observed impact solely

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or directly to EPM, because many actors and factors are in play. However, the evidence available in these three countries confirms that EPM and NRMSA contributed to:

- formulation of policies
- creation and/or strengthening of NRM institutions
- multi-sectoral coordination
- capacity for natural resources data management and environmental assessment
- mechanisms for private sector/NGO participation in NRM to promote grassroots involvement.

1. What environmental policies have been adopted as a result of the NRM plan and how are they being implemented?

Official recognition by the developing country government was planned for and sought for the NRM plans in each country, with the view to using the plan as the foundation for a program in NRM. Once approval had been attained it served as a sanction for the government and other institutions to move forward with setting in place the institutional, legal, and other mechanisms necessary to support effective implementation of the policy. For example, the Rwanda Environmental Action Plan was formally approved by the Council of Ministers, Government of Rwanda, in May 1991. Once the plan was submitted to the government, approval took five months. In Nepal, the final draft NCS document was completed in June 1987. The following fall several briefing meetings with senior government officials were held, the feedback from which was incorporated into the final draft. Formal government approval by the royal family and senior level government officials was obtained in the spring of 1988. The NCS Implementation Office noted that official approval was relatively easy to obtain because the royal family and senior government officials were kept well-informed by the NCS Secretariat during the drafting effort. The elapsed time between final draft preparation and formal approval in both cases was not insignificant, indicating that government approval can be a bottleneck in the effort and suggesting that it may be critical to plan for this important time of consensus building when the national NRM planning effort is being planned. Considering the difficulty or impossibility of moving forward with implementation without approval, this investment of time in seeking approval may be worthwhile.

Once a plan is approved (or under its aegis while it is being drafted), supporting policies and programs were often developed. For example, the Rwanda NEAP provided the context within which the Government of Rwanda was able to request assistance from

UNEP, in the form of a UNEP staff person, to review existing environmental legislation and to recommend new legal instruments. Similarly in Nepal following government approval a special working group was formed to review existing legislation and to make recommendations for strengthening environmental legislation. Each time the process involved several major steps to move towards establishing an appropriate and supportive policy environment.

Most countries explicitly recognized that national level NRM planning ideally should be an ongoing process and that the actual plan should be revised periodically, for example, on a five year basis. However, the NRM plans investigated were recent enough that no real plans had yet been made to revise them, and there was no evidence that planning for revisions was in process. However, in several countries, updated versions and additional printings of older environmental profiles were in process, for example, in Thailand.

An assumption of the project is that improved environmental policies will result in improved natural resources management and environmental conditions. One lesson learned during the course of the EPM project is that effective implementation of policies is difficult relative to their formulation. A lot can happen between the drafting of a national-level policy and the daily natural resource management decisions that characterize the lives of rural people who directly depend on natural resources. Phase II of the From the Ground Up program has set out to question this assumption, that is to ask: To what extent do policies achieve their intended objectives at the local level? If A.I.D.'s intention is to support improved NRM and planning as a means to improve the quality of life for some people, then it is appropriate to periodically question this assumption.

2. What governmental institutions have been created to formulate policy, plans and investment programs for the environment? What institutions have been created to collect and analyze environmental data?

Effective implementation of new policies requires appropriate institutions and institutional mandates. Where NRM planning is a new activity, it is unlikely that the appropriate institutions are already in place. The evaluation team found evidence that the EPM project played a catalytic role, in the context of a multi-donor effort, and has contributed towards this objective by helping the case study countries to: (1) establish new institutions, (2) adopt new responsibilities and mandates by existing institutions, (3) work towards clarity and consensus on responsibilities among government institutions, and/or (4) encourage coordination among both public and private institutions.

Seeing the need for setting in place appropriate institutions and institutional mandates was sometimes the result of the planning process. Seeing or creating this need took time and could not be accomplished in one fell swoop. In many cases, for example in Nepal, no institutional structures with direct responsibility for the environment existed before the NCS was developed. Even now, the current institutional structures in place for NRM planning in general and NCS implementation in specific are transitional in nature. The philosophy of the NCS Implementation Office in Nepal is that "processes should lead institutional structures." Their approach for NCS implementation, under a major grant from the Swiss Development Corporation, is to work through an "Environmental Core Group" of approximately 30 senior-level technical officers in the government on development of several program themes (environmental planning and assessment, environmental education, public information, heritage conservation). This core group meets frequently for multi-year, intensive policy development workshops. As people become more aware of the need for institutional responsibilities, these structures slowly can be created. Under this evolutionary approach, ownership of future institutional structures is developing among the Core Group and their colleagues. IUCN believes that this approach will result in more lasting structures and a higher probability that environmental planning and management will be incorporated in development planning in Nepal.

During implementation of the Nepal NCS, several new institutions are evolving. The NCS called for creation of a National Council for the Conservation of Natural and Cultural Resources (NCCNCR) comprised of senior level government officials and representatives from the private sector, NGOs, professional organizations and conservation societies to serve as a senior level, policy-making body with oversight responsibility for the implementation of the NCS. It called for a full time secretariat, to be located in the National Planning Commission, to assist the NCCNCR. This appears to be happening. The NCCNCR was established in January 1991, under the National Planning Commission. The NCS Implementation Office is effectively serving as the secretariat for the NCCNCR.

The government hopes to move towards an arrangement in which the secretariat functions (administrative and technical backstopping) are housed in the Environmental Planning and Protection Division of the National Planning Commission and that the NCCNCR is eventually replaced with a Nepal Environmental Planning and Protection Council. This council would serve as an advisory body to a new authority, namely the Nepal Environmental Planning and Protection Agency. This agency would differ from the NCCNCR in having the extra teeth of statutory powers of implementation, monitoring and enforcement of environmental programs and policies. Its functions would include assuming a coordinating

role among the Nepal Environmental Planning and Protection Council, the National Planning Commission, and relevant departments and environmental units of line ministries. It would furnish advice to the prime minister and the cabinet, and its programmatic focus would be on: environmental impact assessment, environmental planning, pollution control, national heritage conservation (natural and cultural), and the implementation of the NCS.

This evolutionary aspect of institutional arrangements was obvious in other countries visited. For example, in Rwanda responsibility for the NEAP was lodged in a small government office that originally was in the Ministry of Health. As part of the NEAP process, this office was eventually moved to an advisory position within the Ministry of Planning and expanded, a dramatic step that represented a significant elevation in the importance assigned to the effort. However, the office still has interim qualities. The terms of reference of the USAID/Rwanda-funded technical advisor call for the advisor to assist this office, simply called the Project on Environment and Development, in determining its position and role within the Ministry of Planning.

The National Environmental Secretariat in Kenya is perhaps an example of devolution, or erosion of mandated responsibilities and power. Environmental planning and protection are nominally under the responsibility of the National Environmental Secretariat which serves as an advisory body to the Office of the President. The National Environmental Secretariat was established under the former president and its mandate and power has largely been eroded by the rising importance of the current president's Presidential Commission on Soil Erosion, a conceptually parallel agency. EPM assisted the National Environmental Secretariat by conducting an institutional evaluation in 1987 and recommended ways to strengthen the organization. Although the recommendations have never been formally accepted by the government, the National Environmental Secretariat itself uses the recommendations as a management tool and guide in its own development, to the extent that it can achieve that without government support.

3. Do multi-sectoral coordination mechanisms exist to integrate environment into overall development planning and how well do they function?

An important issue in implementation of a NRM plan was how to achieve effective coordination among the different public and private institutions that may be involved, and, within the public sector, among the several sectoral ministries that have critical responsibilities for environmental management. Coordination would involve a rational and recognized division of functions among the different institutions, effective communication, and

cooperation and collaboration to ensure that each institution is working towards the same objectives and in a fashion that promotes synergy as much as possible.

In all three countries visited, responsibility for implementation of the plan and coordination among sectors and organizations has been lodged in an advisory office with limited resources -- in terms of staff and money -- for actual implementation. Implementation is then a function of whether the sectoral ministries and other institutions, with their staff and budget resources, have been co-opted (in the positive sense) and themselves are on board and are supportive of the effort.

This arrangement -- that is, an advisory body that has coordinating responsibilities over sectoral ministries -- is in contrast to the creation of a separate ministry of the environment, or equivalent. In the three countries visited, this issue was under debate. One view was that the creation of an environment ministry is a means to empower the effort towards NRM and planning. Another view was that even with the creation of a separate environment ministry the need for coordination among sectors or subsectors still constrains the effort. Coordination continues to be necessary, because environmental issues cut across not only environmental subsectors, for example, forestry, water resources, protected areas conservation, but also other sectors important in development planning, such as rural development and education. There was an expression of concern in each country that compartmentalizing environment into a separate ministry would run the risk of having it compete rather than cooperate with other sectoral ministries; however, no apparent consensus emerged on these two views.

In all three countries the evaluation team was made aware of the difficulty in achieving effective coordination among government agencies in particular. It is difficult for other sectors to report to or through a person, ministry or agency responsible for the environment, especially when that coordinating agency in fact has no bureaucratic power (when measured in units of staff and budgetary resources) that allows for implementation of actions. Often the focus turns to reporting requirements rather than coordination. Organizationally it is difficult to mandate coordination or to organize government ministries in a way that institutionalizes coordination. Relevant agencies must see a need for coordination, see that coordination is somehow in their best interest, and essentially agree to being coordinated by some coordinating body. In Nepal, a sectoral approach is consciously being avoided. As people become more aware of linkages among sectors, through their efforts to develop policies and programs, the need for coordination will become more evident.

4. Is the government effectively involved in environmental assessment of development projects?

Institutions visited consistently expressed a need for developing a capacity for natural resources data collection and analysis, of which environmental assessment is a subset. All three implementation offices (Project in Environment and Development in Rwanda, Environmental Protection Council in Ghana, and NCS Implementation Office in Nepal) had responsibility for conducting environmental assessment; however, the countries had little current capacity in environmental assessment in particular or natural resources data management in general. In Rwanda the terms of reference of the USAID/Rwanda-supported technical advisor include assistance to the Project on Environment and Development to develop this capacity. Five people have already been hired, some of whom are currently in training. In Nepal, a program on environmental impact assessment is under development by the Environmental Planning and Assessment program in collaboration with the Environmental Core Group. The NCS Implementation Office has facilitated the production of draft environmental impact assessment guidelines by the Environmental Core Group. These draft guidelines are viewed as potentially very effective by other bilateral development agencies. To date they have been tested on a portfolio of 32 projects under the government. Based on this pilot testing the guidelines will be refined. In addition, planning procedures (guidance for how to use environmental impact assessment in program and project development) are in draft form. At this point the intention is to develop sector-specific guidelines as well.

Almost all countries visited perceived natural resources data management and expertise as an exceptional attribute of WRI and indicated that the World Resources Report was a highly valued and used resource. (The evaluation team observed copies of the World Resources Report in the offices of every organization visited!) Under the design of EPM II, a stronger commitment to supporting developing country capacity in natural resource data management in general and environmental assessment in particular should be examined, based on the strongly expressed need for developing these capabilities.

5. What mechanisms exist for private sector and NGO participation in policy-making?

A salient feature of EPM has been to promote NGO participation in NRMSA efforts. Increasing public participation, primarily through the work of NGOs has been relatively successful under the project. In particular, EPM has been able to achieve multiplier effects by focusing on umbrella organizations of NGOs. The three countries visited each had at least one umbrella NGO organization of environment and development NGOs that appeared to be effective, for example ARDI in Rwanda, GAFVOD in Ghana, and

IUCN/Nepal in Nepal, as well as KENGO in Kenya. In Nepal, where implementation is underway, NGOs are highly involved in implementation activities.

Nonetheless little evidence exists to suggest that private sector and NGO involvement is being institutionalized -- that is, mandated and protected in some way. The evaluation team was aware that certain agencies or ministries had oversight responsibilities of NGOs; however, the team found evidence that this function was ineffectively performed. For example, in Rwanda, two separate government offices had responsibilities for coordinating NGOs, but neither had the resources to do it. However, in some circumstances participation was formally institutionalized. For example, the National Council for Coordination of Natural and Cultural Resources (NCCNCR) in Nepal had private sector and NGO representatives.

Instead of formally institutionalizing the participation of the private sector or NGOs the trend appears to place the onus on the NGO community to claim a place at the table by being there, being visible, and in essence, asking for a place. This may be sufficient for the cause, but may also be a constant battle to be fought by the NGOs. This sense of constant struggle was evident in Rwanda, where NGOs admit that they must lobby for continued opportunities to participate and influence the NEAP process.

Where formal mechanisms for dialogue between NGOs and the private sector and the government are lacking, the media may play a strong role in providing a forum for an informal dialogue. This appeared to be the case in Ghana. Truly free NGOs and a free media are not common in developing countries, but they can be essential building blocks for increased democratization and more open societies. In addition, there appears to be little effort to make environmental assessment and other similar processes public and open to NGO scrutiny. In Nepal there was a reference to this issue in the draft "Institutional Framework for Environmental Management," in which it was recognized that public access to information is consistent with the requirements for community involvement in environment and natural resources. The issues of promoting public access to environmental information and developing an environmental voice in the media as a means of supporting public - government dialogue could be considered for increased, direct support under the design of EPM II.